



# IEEE Ottawa Section Report to the Annual General Meeting 2016

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October 14th, 2016



**IEEE**

**Ottawa  
Section**



## **IEEE Ottawa Section Report to the Annual General Meeting 2016**

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## IEEE Ottawa Section Chair's Report

The IEEE Ottawa Section had a guiding vision for a second year embodied in the acronym **IEEE** which could also stand for **Innovate, Educate, Engage** and **Excel**. This was a year of implementing our innovations from the programs launched in the previous year as well launching several new programs - the main one in conjunction with Christie Lake Kids including the launch of an EPICs initiative, the first one in R7; creation of an MOU with the CPEIA;

**Educate:** Education continues to be a big part of the section initiatives, getting students interested in Science and Engineering through TISP initiatives and executing lesson plans with students. This past year we implemented the gumball machine lesson plan as part of the inner city Christie Lake Kids (CLK) program. We also launched the CLK Lego robotics project and received a \$500 grant from ICF to enable purchase of a second kit. This has now become a new dedicated CLK program for kids interested in robotics, starting Fall 2016.

**Engage:** We engaged various members of the community by continuing to actively reach out to schools through our IEEE Day and Ottawa Robotics Competition (ORC) activities. IEEE Day was again promoted both at the student branches as well as by the Section at the Tech Tuesday Event. The Annual IEEE Ottawa Robotics Competition was held in May at Longfields Davidson Heights Secondary School, Barrhaven, Ottawa. We introduced a new Arduino based completion. It is a highly successful event. We have also signed an MOU with the Canadian Printable Electronic Industry Association (CPEIA) to engage with this new and growing industry.

**Excel:** the Ottawa Section continues to support many excellent initiatives by the executive members, committee and chapter chairs and the student branches of University of Ottawa, Carleton University and Algonquin College. We worked hard this year to improve communications and publications with the addition of publication forms to make it easier for section chapters to get information sent out. We also improved our online presence with Facebook and Twitter accounts. The many annual events such as Student Professional Activities Conference (SPAC) to network with local industries contribute to this excellence. Battle Royale continues to be a favourite amongst the gamers as well as IEEE Xtreme. WIE Wine and Cheese is another popular event for the Section, which also sponsors technically and in some cases financially many conferences. Please refer to the individual committees and chapter reports for details on more activities supported by the Ottawa Section.

The Senior Members Committee has been actively helping with membership grade elevation. From October 2014 to September 2015, the Section had 17 members elevated to the senior grade.

The Section is financially sound and very active with technical activities. In the past AGM-to-AGM year, the Section held 5 Distinguished Lectures, 54 technical activities without double counting, several conferences and workshops.

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### **Christie Lake Kids Initiative**

- Did TISP workshop with CLK kids; Wolfram Lunscher and Janet Davis. Kids enjoyed building gumball machines. They loved everybody was involved. Very positive and happy.
- Got kids involved with Lego robotics, they received two kits, one through and ICF grant. Fall 2016 will inaugurate a new program at CLK for Lego Robotics

### **Section Picnic – July 2016**

- Held at Andrew Haydon Park
- Well attended, including guests from OSPE and PEO

### **IEEE Standards Association Workshops**

- Held at Ericsson – Ottawa

### **“Raven Knights” Carleton University CanSAT Team**

- It is an annual student design, build and launch competition for space-related topics
- End-to-End complex engineering project
- Organized by AAS and AIAA

### **Ottawa Robotics Competition 2016**

- Potentially something at their summer camp. Epics funding available to us.

[2016 Electrical Power and Energy Conference \(EPEC\)](#)[IEEE Engineering in Medicine and Biology Society \(EMBS\) International Student Conference \(ISC\) 2016](#)  
[2016 International IEEE EMC Symposium](#)

**2016 IEEE International Conference on Prognostics and Health Management (ICPHM)**

### **Distinguished Lecturers**

- The State of the Art of Neurodynamic Optimization - Past, Present, and Prospect
- Granular Computing: Pursuing New Avenues of Computational Intelligence
- Nanotextured Microfluidic Substrates Biomimicking Structured Hierarchy of Living
- Every picture tells a story: visual cluster assessment and rectangular relational data
- Learning in nonstationary environments

As you can see from the above, our Section is quite healthy and vibrant. This is mainly due to our strong volunteering base which we continuously count upon and are blessed to have. Without them, none of the above projects, initiatives, events, activities and gatherings would be possible. I want to thank everyone for their support and work they have done to make our Ottawa section the best in R7.

Janet Davis, SMIEEE  
Chair, IEEE Ottawa Section

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## **Committee Reports**

### ***Annual General Meeting (AGM) Planning Committee***

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Chair: Anissa Shaddy

The IEEE Ottawa Section celebrated its 71st AGM on November 6, 2015 at the Shaw Center. It was a well-attended function. The first part of the function was the official part where elections for the Executives for 2016 were conducted. The second part of the function was the banquet where awards for the Section groups, individuals and the industries were awarded. The key note speaker was Dr. Paul Corkum. The student volunteers from Carleton University, the University of Ottawa and Algonquin College helped to ensure the success of the AGM under Mrs. Anissa Shaddy, the Section's AGM Committee Chair, leadership. The location of the event was the Ottawa Convention Centre (Trillium Ballroom – AGM & Banquet) Address: 55 Colonel By Drive, Ottawa ON. At the AGM, elections for 2016 were held and the following members were acclaimed to the following roles: Chair: Mrs. Janet Davis, SMIEEE, Vice Chair: Ms. Anissa Shaddy, Treasurer: Mike Bourassa, Ph.D, SMIEEE and Secretary Abdulhak Nagy.

Several corporate and Section awards as well as the appreciation award were presented at the AGM. For more details, please see the report of the Awards Committee.

### ***Awards and Recognitions Committee***

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**Chair:** Wahab Almuhtadi [almuhtadi@ieee.org](mailto:almuhtadi@ieee.org)

**Members:** Executive Officers of the Ottawa Section (Chair, Vice Chair, Secretary, Treasurer, Past Chair), Raed Abdullah, Sreeraman Rajan.

**Website:** <http://www.ieeeottawa.ca/about/awards-2/>

The Award Committee works closely with IEEE Ottawa Section chapters, committees, affinity groups, and student branches and encourages members, engineering community, academia and Industry to submit their nominations for the IEEE Ottawa Section Awards available on <http://www.ieeeottawa.ca/about/awards-2/>. The Award winners are announced every year at the IEEE Ottawa Section Annual General Meeting-AGM.

**The winners for the 2015 IEEE Ottawa Section Awards are as follows:**

#### **Corporate Awards**

##### **Outstanding Information and Communications Technology Award**

- **Corsa Technologies** for its innovation in delivering programmable switches, routers and Layer4-7 capabilities for Software Defined Networks (SDN) and Network Function

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*Virtualization (NFV).*

### Outstanding High Technology Award

- **Shopify** for its leading reliable and scalable cloud-based multichannel commerce platform designed for businesses of all sizes.

### Outstanding Clean Technology Award

- **WCI Environmental Solutions** for its innovation in treatment of organic waste and biosolids, wastewater and leachate and polluted bodies of water.

### Appreciation Awards

- **Juniper Networks** for its valuable support to the activities of the IEEE Ottawa Section and to the success of the IEEE IM 2015 conference.

## AGM Keynote Speaker Appreciation

### Appreciation Plaque

- **Dr. Paul Corkum** for in appreciation of his contribution to the IEEE Ottawa Section as the AGM 2015 Keynote Speaker.

## Recognition Individuals

### Outstanding Educator Award

- **Dr. Hussein Mouftah** for his outstanding vision, caliber, and contributions as a university educator who supervised more than 500 graduate student researchers over the course of his career, many of whom are now researchers in private sector companies, university professors or entrepreneurs.

### Outstanding Engineer Award

- **Martin Plesnik** for his continuous innovation and sustained technical contributions to the development of power supply technologies for wireless applications.

### Outstanding Service Award

- **James R. Green** for long-term, dependable, and quality service to the IEEE EMBS Chapter and the field of biomedical engineering

### Outstanding Volunteer Award

- **Kexing Liu** for his long term contribution through the service as the Chair of IEEE Photonics Society Ottawa Chapter.

## Recognition Ottawa Section Groups

### Outstanding Chapter Award

- The **Ottawa Joint Chapter of Communications Society, Broadcast Technology Society and Consumer Electronics Society** for organizing technical events and workshop, and promoting IEEE Ottawa Section.

### Outstanding Student Branch Award

- The **Carleton University Student Branch** for organizing events and increasing active services to its members.

### Outstanding Committee Award

- The **Ottawa Teacher-In-Service Program** for it promoting TISP, working with pre-university students and increasing the visibility of the Ottawa IEEE Section.

## ***Bylaws Committee***

Chair: Branislav Djokic [branislav@ieee.org](mailto:branislav@ieee.org)

Vice Chair: Kexing Liu [Kexing.Liu@ieee.org](mailto:Kexing.Liu@ieee.org)

The document was reviewed and no changes were necessary.

## ***Communications / Publications (CPC) Committee***

Chair: Maytham Sabbagh [maytham.sabbagh@ieee.carleton.ca](mailto:maytham.sabbagh@ieee.carleton.ca)

Section Webmaster: Ismail Syed [ismail.syed@ieee.carleton.ca](mailto:ismail.syed@ieee.carleton.ca)

Website: <http://www.ieeeottawa.ca/publications/>

### **Best Practices**

- Submission Form:
  - The online submission form is the best thing that happened to the CPC, as now the news is compiled in one place when sent by the form and the committee only needs to add the news to the respective media platform.
- Website:
  - The section website has been up to date and the webmaster is actively working on improving the information on the website.
- Newsletter:
  - The newsletter is being sent out at the beginning of each month and is including all the information being sent to the CPC.
- Social Media:
  - Social media accounts are set up and being used as needed.

The plan for CPC in the coming year is to find volunteers to take on the roles of Newsletter Editor and Social Media Director and actively work on improving these two forms of publications. The team will also

add better options in the online submission form to allow section executives to fully customize their news. The only method of submitting news to the CPC will be the submission form and any other method will be disregarded. The CPC will actively work with section executives in order to figure out when different events are and have a way to remind executives to submit their news. The CPC will also work with the section executives on submitting post event news with pictures and videos if possible.

### ***Educational Activities (EA) Committee***

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Chair: Branislav Djokic, [branislav@ieee.org](mailto:branislav@ieee.org)

Website: <http://www.ieeeottawa.ca/ea>

1. On Sep. 20, 2016, the IEEE Ottawa Section Educational Activities participated in the organization of a seminar “*Next Generation Photovoltaics*” presented at Algonquin College, by Dr. Karin Hinzer, Professor, Canada Research Chair Canada, SUNLAB, School of Electrical Engineering and Computer Science, University of Ottawa.

Photovoltaics have reached grid parity in the sunniest areas of the world and are set to do so next year in Eastern Ontario. This talk will cover photovoltaics basics as well as newer technologies for higher efficiencies. Current panel efficiencies can reach 23% efficiency, while newer technologies can reach up to 40%. How is this obtained and what do you gain in terms of payback including greenhouse gas emission reductions? How are these panels integrated in the grid? How can these photovoltaics be converted to power other devices in locations where power cannot be transported by conducting wires? Answers to these questions and others using examples of research projects being done at the uOttawa SUNLAB were presented.

The seminar was organized in conjunction with the IEEE Ottawa Chapter of Power and Energy Society (PES), IEEE Ottawa Joint Chapter of Reliability Society and Power Electronics Society (RS/PELS), IEEE Ottawa Chapter of Photonics Society, IEEE Ottawa Chapter of Industry Applications Society (IAS), and Algonquin College Student Branch (ACSB). The presentation was interactive and very well received as it addressed issues related to the renewable energy and the Canadian energy situation. It was followed with an extended discussion among the speaker and the audience.

2. On Oct. 11, 2016, the IEEE Ottawa Section Educational Activities organized a seminar “*Fundamental changes to the electric power system-post 2018*” presented at the National Research Council in Ottawa, by Mark Siira, Director of Technology Strategy, ComRent International, and David Narang (via video link), Principal Engineer at the National Renewable Energy Laboratory (NREL) in Golden, Colorado.

Part I. Standards have always been an important consideration in the work of engineers and testing companies. But their role is increasing with the deployment of smart grids and the changes of how buildings interact with electricity. Some changes coming in the next two years will impact the testing done on systems that are interconnected to the electric power system (EPS). The electric power infrastructure is transforming from a system of power interconnections to a diverse, interconnected, interdependent, and adaptive system. As the smart grid develops, the interconnection standards will

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evolve to help enable interoperability, interconnection and integration of disparate systems, information technology (IT) and communications. This presentation will discuss the specific areas of impact for testing and commissioning of utility protection systems and interconnection.

Part II. In his part of the presentation, David Narang provided a summary of programs that the US Department of Energy is currently working on. This seminar was organized in conjunction with the IEEE Ottawa Instrumentation & Measurement Society, Power and Energy Society, and Reliability & PE Society.

### ***Engineers-in-Transition (EiT) Committee***

Chair: Vacant

No activities reported

### ***Membership Development (MD) Committee***

Chair: Anissa Shaddy

E-mail: [anissa@ieee.org](mailto:anissa@ieee.org)

Co-chair: Maryam Kaka

| Activity Date, Time, Location                       | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description                                                   |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Nov. 6, 2015, Shaw Centre                           | MD Booth at IEEE Ottawa Section 71 <sup>st</sup> AGM – information to members                                           |
| January 26, 2016, Hellenic Centre                   | MD Booth at IEEE SPAC – recruiting and information                                                                      |
| March 30 <sup>th</sup> , 2016, University of Ottawa | MD Booth at uOttawa Research Day – recruiting and information                                                           |
| May 28-31 2016, Carleton University                 | MD Booth at EMBS International Student Conference (ISC) 2016 – recruiting and information                               |
| September 14, 2016, Carleton University             | MD Booth at Carleton's Throwback Homecoming Celebration: Faculty of Engineering and Design – recruiting and information |

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### Nominations and Appointments

Chair: Rami Abielmona [rabiemo@ieee.org](mailto:rabiemo@ieee.org)  
 Member: Sreeraman Rajan [Sreeraman@ieee.org](mailto:Sreeraman@ieee.org)  
 Member: Raed Abdullah [raedabdullah@ieee.org](mailto:raedabdullah@ieee.org)  
 Member: Wahab Almuhtadi [almuhtadi@ieee.org](mailto:almuhtadi@ieee.org)  
 Member: Branislav Djokic [branislav@ieee.org](mailto:branislav@ieee.org)  
 Member: John Grefford [Grefford@ieee.org](mailto:Grefford@ieee.org)  
 Member: Tom Lavrisa [lavrisa@ieee.org](mailto:lavrisa@ieee.org)

The Nomination and Appointments (N&A) Committee is responsible for the nomination and election process for next year's four executive officers of the Section (Chair, Vice-Chair, Secretary and Treasurer). The N&A Committee is also responsible for recommending and appointing qualified candidates for positions in the Section chapters, affinity groups, and committees.

### Ottawa Robotics Competition (ORC) Committee

**Co-Chair:** Heidi Li [heidi.li.ca@ieee.org](mailto:heidi.li.ca@ieee.org) and David Huynh [david.huynh.ca@ieee.org](mailto:david.huynh.ca@ieee.org)

**Vice Chair:** vacant

All other committee members can be found at <http://orc.ieeeottawa.ca/executives>

**Website:** <http://orc.ieeeottawa.ca>

#### ORC Activities

| Activity Date, Time, Location                              | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description       | Title/Speaker or Workshop Name               | Attendance IEEE/Total | Joint Activity Sponsors |
|------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------|-----------------------|-------------------------|
| Various dates, across the Ottawa region                    | Approximately 80 preparation meetings                                       | Variable names depending on discussion topic | Averaged: 2.3 / 3.3   | N/A                     |
| November 28, 2015, 1 to 3 pm, Carleton University, UC 231  | Open House: An introduction to the general public about ORC.                | ORC 2016 Open House                          | 9 / 150               | N/A                     |
| January 9, 2016, 10 am to 3 pm, uOttawa, SITE 2061         | Supervisors' Workshop: Provide training to inexperienced supervisors.       | ORC 2016 Supervisors' Workshop               | 5 / 17                | N/A                     |
| February 17, 2016, 8 am to 3 pm, uOttawa, SITE 2061        | Workshop: Provide opportunities to students to prepare for competition day. | ORC 2016 Workshop #1                         | 4 / 14                | N/A                     |
| February 20, 2016, 9 am to 3 pm, uOttawa, SITE 2060 / 2061 | Workshop: Provide opportunities to students to prepare for competition day. | ORC 2016 Workshop #2                         | 5 / 32                | N/A                     |
| April 28, 2016, 8 am                                       | Workshop: Provide                                                           | ORC 2016                                     | 5 / 100               | N/A                     |

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|                                                                                 |                                                                             |                                        |          |     |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------|----------|-----|
| to 3 pm, uOttawa, SITE 2061                                                     | opportunities to students to prepare for competition day.                   | Workshop #3                            |          |     |
| April 30, 2016, 9 am to 3 pm, uOttawa, SITE 2061                                | Workshop: Provide opportunities to students to prepare for competition day. | ORC 2016 Workshop #4                   | 3 / 80   | N/A |
| May 14 <sup>th</sup> – 26 <sup>th</sup> , 2015, uOttawa, SITE 2060 & IBM Ottawa | Training sessions for volunteers                                            | ORC 2016 – Volunteer Training Sessions | 16 / 35  | N/A |
| May 28, 2016, 7 am to 6 pm, Longfields-Davidson Heights Secondary School        | Competition day                                                             | ORC 2016 Competition Day               | 20 / 500 | N/A |
| June 17, 2016, 6 pm – 9 pm, Father's & Sons                                     | Volunteer appreciation party                                                | ORC 2016 Volunteer Appreciation Party  | 7 / 19   | N/A |

### Best Practices within the ORC Committee

The ORC Committee employed the following best practices this past year:

- Frugal penny-pinching
- Advertising through a more effective and targeted manner with zero costs
- Increasing planning efficiency of the committee
- Entertaining students in novel ways
- Engaging patrons successfully for greater interest and investment in the ORC

### Awards and/or Recognition

The Ottawa Citizen featured ORC online (<http://bit.ly/ORC2016OTTCITIZEN>) and in print.

Otherwise, the ORC Committee continued not to issue formal awards and eliminated meeting meals and small training incentives. All ORC volunteers were offered the following for the 3000 total volunteer hours they contributed for ORC 2016:

- An ORC T-shirt
- A pizza dinner on setup night
- A pizza lunch on competition day
- A certificate of appreciation
- A volunteer appreciation dinner

### Unique Events from 2016

The ORC Committee organized the following unique events for ORC 2016:

- Arduino platform added to the competition
- Supervisors' workshop
- Opening and closing ceremony with IBM NAO

**Unique Events for 2017**

Since next year is the 15<sup>th</sup> anniversary of the IEEE Ottawa Robotics Competition, there are many new things that the ORC Committee would like to organize. However, we need more resources to make this possible. Thus, the ORC Committee invites all who are interested and/or motivated to promote STEM fields and share their passion to students to join us by emailing [orcinfo@ieeeottawa.ca](mailto:orcinfo@ieeeottawa.ca).

**Senior Membership Committee**

---

Chair: Dr. Sreeraman Rajan

Vice Chair: Dr. Balaji Bhashyam

The Section had 16 Senior Member elevations from October 2015 to September 2016.

| First name  | Last name |
|-------------|-----------|
| Simon       | Henault   |
| Andy        | Adler     |
| Mojtaba     | Ahmadi    |
| Chung-Horng | Lung      |
| Sinisa      | Cvetkovic |
| Haiwei      | Dong      |
| Saeid       | Homayouni |
| Yvan        | Labiche   |
| Thomas      | Lang      |
| Daniel      | Levesque  |
| Peter       | Moo       |
| Nabil       | Naas      |
| Petre       | Popescu   |
| Paulaf      | Sabourin  |

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|                  |        |
|------------------|--------|
| Muhammad Zeeshan | Shakir |
| Peiying          | Zhu    |

### Strategic Planning (SP) Committee

Chair: Barbara Waruszynski, [b.waruszynski@sympatico.ca](mailto:b.waruszynski@sympatico.ca)

No activities reported.

### Teacher In-Service Program (TISP) Committee

Name: Wolfram Lunscher, [wlunscher@gmail.com](mailto:wlunscher@gmail.com)

| Activity Date, Time, Location                                            | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                            | Attendance IEEE/Total                                     | Joint Activity Sponsors                 |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------|
| October 7, 2015, Stittsville Public School                               | Workshop presentation to grade 2 class                                | Launching into Space, commemorating international space week. Wolfram Lunscher Presenting | IEEE - 1<br>Other -25                                     | Canadian Space Society                  |
| November 12-13, 2015, Science Teachers Association of Ontario conference | Workshop + IEEE presentation to K-12 school teachers                  | IEEE summary presentation + Tall Tower Lesson Plan<br><br>+ exhibit floor booth           | IEEE – 8<br>Other – 25<br><br>+ 100s on the exhibit floor | Science Teachers Association of Ontario |
| February 3-17, 2016, Dempsey Community Centre, Ottawa                    | TISP Lesson Plan workshop, Christie Lake Kids, Ottawa                 | Gumball Machine Lesson Plan                                                               | IEEE – 3<br>Other - 15                                    |                                         |
| June 16, 2016, Ottawa Jewish Community School                            | Workshop presentation to grade 5 class                                | Launching into Space, Canadian space technology, and rocket propulsion                    | IEEE – 1<br>Other- 20                                     | Canadian Space Society                  |

## IEEE Ottawa Section Report to the AGM 2016

### Awards and/or Recognitions

Ottawa Section Committee of the Year Award

### List of unique events held, sponsored or organized

Science Teachers Association of Ontario conference in Toronto – Annually in November, maintained an exhibit booth promoting IEEE and TISP + ran a workshop for teachers

## Chapter Reports

### *AESS – Aerospace and Electronic Systems Society*

Chair: Hugh Reekie, [h.reekie@ieee.org](mailto:h.reekie@ieee.org)

Vice-Chair: Tony Ponsford, [tony\\_ponsford@Raytheon.com](mailto:tony_ponsford@Raytheon.com)

Website: <http://www3.bell.net/max-com/ottawa.AESS.html>

| Activity Date, Time, Location                    | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name           | Attendance IEEE/Total | Joint Activity Sponsors |
|--------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------|-----------------------|-------------------------|
| 25 May 2016<br>2 – 4 pm<br>Carleton U,<br>Ottawa | Tech meeting – Electronics & sensors on Flexible substrates           | Dr. Ravinder Dahiya, Univ of Glasgow, UK | 12/30                 | VTS                     |
| 9 Sept 2016<br>2-4 pm<br>Ottawa U                | Antenna Suystems for 21st Century spacecraft                          | Dr. Sudhakar Rao, Northrop Grumman, USA  | 10/20                 | AP/MTT, VTS etc         |

### List of unique events held, sponsored or organized

Radar Concentration Workshop held, Shirley Bay, October 2015

### List of proposed unique events

2+ technical presentations organized. Radar Concentration Workshop held, Shirley Bay, November 2016

### *AP/MTT – Joint Chapter of Antennas and Propagation Society Microwave Theory & Techniques Society*

Chair: Qingsheng Zeng, [qingshengzeng03@163.com](mailto:qingshengzeng03@163.com)

Vice Chair: Leonard Petrie, [petrie@rogers.com](mailto:petrie@rogers.com)

Secretary: Yuming Tao, [Yuming\\_Tao@pmc-sierra.com](mailto:Yuming_Tao@pmc-sierra.com)

Website: [http://www.ieeeottawa.ca/ap\\_mtt/home](http://www.ieeeottawa.ca/ap_mtt/home)

| Activity Date, | Activity Type (Tech | Title/Speaker or Workshop | Attendance | Joint Activity |
|----------------|---------------------|---------------------------|------------|----------------|
|----------------|---------------------|---------------------------|------------|----------------|

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| Time, Location                                                          | Meeting, Workshop, DL, etc) and Brief Description                             | Name                                                                                                                             | IEEE/Total | Sponsors                                                                            |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|
| 1) 10 Nov 2015<br>17:00–19:00<br>Board Room<br>Fidus Systems            | IEEE Electromagnetic Compatibility Society (EMC-S)<br>Distinguished Lecture   | Demystifying Signal Integrity in High Speed Designs by Prof. Ram Achar                                                           | 5/10       | AP/MTT and EMC Chapters                                                             |
| 2) 22 Jan 2016<br>11:30–13:00<br>Room ME 4124<br>Carleton University    | IEEE Microwave Theory and Techniques Society (MTT-S)<br>Distinguished Lecture | Wonderful World of Nonlinearity: Modeling and Characterization of RF and Microwave Circuits by Prof. Jose C. Petro               | 21/32      | AP/MTT, EMC and CPMT Chapters, Department of Electronics (DoE), Carleton University |
| 3) 18 Mar 2016<br>13:30 – 14:30<br>Room ARC 233, University of Ottawa   | IEEE Photonics Society Distinguished Lecture                                  | Switching technologies for spatially and spectrally flexible optical networks by Prof. Dan M. Marom                              | 12/21      | AP/MTT and Photonics Chapters                                                       |
| 4) 18 Mar 2016<br>14:30 – 15:30<br>Room ARC 233, University of Ottawa   | Joint Symposium                                                               | Flexible, multi-rate coherent transmission and network applications by Dr. Maurice O'Sullivan                                    | 12/21      | AP/MTT and Photonics Chapters                                                       |
| 5) 18 Mar 2016<br>15:30 – 16:30<br>Room ARC 233, University of Ottawa   | Joint Symposium                                                               | Emerging Photonic Component Technology at the National Research Council Canada by Dr. Siegfried Janz                             | 12/21      | AP/MTT and Photonics Chapters                                                       |
| 6) 30 Mar 2016<br>17:00–19:00<br>Board Room<br>Fidus Systems            | Technical Seminar                                                             | Electromagnetic Environmental effects in Tactical Communication Systems by Kris HATASHITA                                        | 8/15       | AP/MTT, EMC and CPMT Chapters                                                       |
| 7) 16 May 2016<br>17:00–19:00<br>Board Room<br>Fidus Systems            | IEEE Electromagnetic Compatibility Society (EMC-S)<br>Distinguished Lecture   | Preventing RFIC interference issues: floorplan development, isolation- and grounding strategy by Dr. Jan Niehof                  | 5/9        | AP/MTT, EMC and CPMT Chapters                                                       |
| 8) 25 May 2016<br>17:00–19:00<br>Board Room<br>Fidus Systems            | IEEE Electromagnetic Compatibility Society (EMC-S)<br>Distinguished Lecture   | Seeing is Believing – Demonstration data showing three EMC Concepts by Dr. Scott Ppiper                                          | 5/9        | AP/MTT, EMC and CPMT Chapters                                                       |
| 9) 14 July 2016<br>14:00–15:00<br>Room SITE5084<br>University of Ottawa | IEEE Ottawa Summer Seminar                                                    | Recent Progress in Microwave Antenna Precision Measurement at National Institute of Metrology (NIM) of China by Dr. Zhenfei Song | 6/12       | AP/MTT, EMC, CPMT and ComSoc/BTS/CES Chapters, School of EECS, University of Ottawa |

|                                                                             |                                                                             |                                                                                                            |       |                                                                                                                     |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------|
| 10) 14 July 2016<br>15:00–16:00<br>Room SITE5084<br>University of<br>Ottawa | IEEE Ottawa<br>Summer Seminar                                               | Quantum Based Self-<br>traceable RF E-field<br>Sensing by Using Rydberg<br>States by Dr. Zhenfei<br>Song   | 6/12  | AP/MTT, EMC,<br>CPMT and<br>ComSoc/BTS/CES<br>Chapters, School<br>of EECS,<br>University of<br>Ottawa               |
| 11) 8 Sept 2016<br>14:00–16:00<br>Room SITE5084<br>University of<br>Ottawa  | IEEE Antennas and<br>Propagation Society<br>(AP–S) Distinguished<br>Lecture | Advanced Antenna<br>Systems for 21st Century<br>Satellite Communication<br>Payloads by Dr. Sudhakar<br>Rao | 12/27 | AP/MTT, EMC,<br>CPMT, VTS,<br>AESS and<br>ComSoc/BTS/CES<br>Chapters, School<br>of EECS,<br>University of<br>Ottawa |

**Best Practices**

- (1) I have attended 2016 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization for RF, Microwave, and Terahertz Applications (NEMO 2016), Beijing, China, 27 – 29 July 2016, exchanged experience and collaborated with other IEEE Sections and AP/MTT Chapters through face-to-face and interaction.
- (2) As a liaison, I have assisted IEEE Ottawa, IEEE Canada and IEEE to set up collaborating relationship with Canadian Printable Electronics Industry Association (CPEIA), and a partner MOU has been signed by IEEE and CPEIA in April 2016. I have co-organized a special half-day Session on Printable Electronics with CPEIA as a part of IEEE's 17th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM 2016), which has taken place in Montreal, QC, Canada, during July 10-13, 2016.
- (3) I have constantly been organizing events with Montreal, Kinston and Toronto AP/MTT Chapters.
- (4) I have assisted our section in recruiting new IEEE members and elevating members to senior members and will be continuing to do so.
- (5) I have been assisting our members in finding their new positions and employers in their recruitments.

- (6) I have always co-organizing activities with other local chapters, educational institutions, governmental departments and companies, to set up and enhance the collaborations with them, attract more audience and serve more members.
- (7) I have constantly been inviting speakers at different levels from graduate students to distinguished lecturers, to foster new engineers and entrepreneurs, improve the research quality and enhance the academic levels of local researchers.

**Awards and/or Recognitions**

- (1) Dr. Qingsheng Zeng has been an Organizer and a Session Chair for 3 special sessions at the 37th Progress In Electromagnetics Research Symposium (PIERS 2016), Shanghai, China, August 8 – 11, 2016.
- (2) Dr. Qingsheng Zeng has been an Organizing Committee Member and Technical Program Committee (TPC) Member, Organizer and Chair of a Special Session “Recent Progress in Antennas, Millimeter Wave and Terahertz and Technology”, a Reviewer for 2016 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization for RF, Microwave, and Terahertz Applications (NEMO 2016), Beijing, China, 27 – 29 July 2016.
- (3) Professor Qi-Jun Zhang in the Department of Electronics at Carleton University has been a keynotes speaker and Technical Program Committee (TPC) Member for the 2016 IEEE MTT – S International Symposium on Numerical Electromagnetic and Multi-physics Modeling and Optimization for RF, Microwave, and Terahertz Applications (NEMO 2016), Beijing, China, 27 – 29 July 2016. Qi-Jun is one Ottawa MTT-S member.

**List of unique events held**

I have organized the Electronics Simulation Expo with ANSYS on 12 May 2016, IEEE Ottawa Summer Symposium on 14 July 2016, a Special Session on Printable Electronics with CPEIA for ANTEM 2016, a Special Session “Recent Progress in Antennas, Millimeter Wave and Terahertz and Technology” for IEEE MTT-S NEMO 2016, and 3 special sessions for PIERS 2016.

## IEEE Ottawa Section Report to the AGM 2016

These events with a large attendance and the financial support by industry have profound impacts afterwards, making it resoundingly successful.

### *CI & SMC – Joint Chapter of Computational Intelligence and Systems, Man and Cybernetics Societies*

Chair: Rafael Falcon, [rfalcon@ieee.org](mailto:rfalcon@ieee.org)

Vice Chair SMC: George Yee, [g.m.yee@ieee.org](mailto:g.m.yee@ieee.org)

Website: <http://www.ieeeottawa.ca/ci>

Joint Chapter: 1. Computational Intelligence (CI)  
2. Systems, Man and Cybernetics (SMC)

Total Number of Technical Meetings:

This Year      14  
Last Year      6

| Activity Date, Time, Location                                                        | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                                                        | Attendance IEEE/Total | Joint Activity Sponsors                                 |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------|
| Thursday<br>Nov 12th,<br>2015, 10:00<br>– 11:30<br><br>NRC,<br>Building M-12         | Technical                                                             | Load estimation and fatigue life tracking for helicopter components using Computational Intelligence techniques<br><br>Dr. Catherine Cheung, NRC      | 6/8                   | N/A                                                     |
| Tuesday<br>Nov 17th,<br>2015, 11:20<br>– 12:05 pm<br><br>Shaw<br>Center,<br>Room 211 | Technical                                                             | Data Fusion in the hierarchy of sensors dedicated to the Surveillance of Canada's borders<br><br>Major (R) Marc Fricker<br><br>Canadian Space Society | 12/32                 | Canadian Tracking and Fusion Group (CTFG) 2015 Workshop |

## IEEE Ottawa Section Report to the AGM 2016

|                                                                                                                                                                                         |                |                                                                                                                                                                                                                 |       |                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------|
| <p>Tuesday<br/>Nov 17th,<br/>2015, 13:30<br/>– 14:15 pm</p> <p>Shaw<br/>Center,<br/>Room 211</p>                                                                                        | Technical      | <p>The coming flood<br/>of Earth<br/>Observation Data:<br/>Challenges and<br/>Opportunities</p> <p>Colonel (R) Andre<br/>Dupuis and Maria<br/>Rey</p> <p>Space Strategies<br/>Consulting Limited<br/>(SSCL)</p> | 12/32 | Canadian Tracking<br>and Fusion Group<br>(CTFG) 2015<br>Workshop |
| <p>Tuesday<br/>Nov 17th,<br/>2015, 2:15 –<br/>3:00 pm</p> <p>Shaw<br/>Center,<br/>Room 211</p>                                                                                          | Technical      | <p>Performance of<br/>the SAR-AIS<br/>Association<br/>System in Polar<br/>Epsilon</p> <p>Paris Vachon<br/>DRDC Ottawa</p>                                                                                       | 12/32 | Canadian Tracking<br>and Fusion Group<br>(CTFG) 2015<br>Workshop |
| <p>Tuesday<br/>Nov 17th,<br/>2015, 4:10 –<br/>5:00 pm</p> <p>Shaw<br/>Center,<br/>Room 211</p>                                                                                          | Technical      | <p>Multi-Sensor<br/>Image Fusion: the<br/>Next Stage for<br/>Research</p> <p>Zheng Liu</p> <p>University of<br/>British Columbia</p>                                                                            | 11/28 | Canadian Tracking<br>and Fusion Group<br>(CTFG) 2015<br>Workshop |
| <p>Wednesday<br/>Dec 9th,<br/>2015, 9:00 –<br/>11:30 am</p> <p>Room 5084<br/>School of<br/>Electrical<br/>Engineering<br/>and<br/>Computer<br/>Science<br/>University of<br/>Ottawa</p> | Technical (DL) | <p>Every picture tells<br/>a story: visual<br/>cluster<br/>assessment and<br/>rectangular<br/>relational data</p> <p>Prof. Jim Bezdek</p> <p>Retired Professor<br/>(IEEE CIS DL)</p>                            | 11/13 | CompSoc; IMS; RAS                                                |
| <p>Wednesday<br/>Jan 20th,<br/>2016, 6:45 –<br/>8:30 pm</p> <p>Lab T-129</p>                                                                                                            | Technical      | <p>Experience of<br/>building Internet of<br/>Things (IoT)<br/>applications</p> <p>Professor Chung-<br/>Horng Lung</p>                                                                                          | 11/17 | N/A                                                              |

# IEEE Ottawa Section Report to the AGM 2016

|                                                                                                          |                |                                                                                                                                                                                              |       |                                                  |
|----------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------|
| Algonquin College Building T                                                                             |                | Department of Systems and Computer Engineering<br><br>Carleton University                                                                                                                    |       |                                                  |
| Thursday Mar 17th, 2016, 6:30 – 8:00 pm<br><br>Room 213B Algonquin College Building P                    | Technical      | Threat Modeling<br><br>Dr. George Yee<br><br>Aptusinnova Inc.<br><br>Adjunct Professor, Carleton University                                                                                  | 8/27  | N/A                                              |
| Tuesday Apr 19th, 2016, 6:30 – 8:00 pm<br><br>Faculty of Social Sciences, Room 1006 University of Ottawa | Technical (DL) | Granular Computing: Pursuing New Avenues of Computational Intelligence<br><br>Professor Witold Pedrycz<br><br>University of Alberta, Edmonton<br><br>IEEE CIS DL                             | 9/17  | CompSoc; IMS; RAS                                |
| Thursday May 12th, 2016, 6:30 – 8:00 pm<br><br>Graduate Student House, Room 307 University of Ottawa     | Technical      | Sensor relocation by mobile robots using multiobjective optimization<br><br>Mr. Benjamin Desjardins<br><br>School of Electrical Engineering and Computer Science<br><br>University of Ottawa | 8/24  | UO Computer Science Graduate Student Association |
| Monday May                                                                                               | Technical      | Multi-agent                                                                                                                                                                                  | 15/53 | Ottawa Machine Learning Meetup                   |

## IEEE Ottawa Section Report to the AGM 2016

|                                                                                             |                |                                                                                                                                                                                   |       |                                            |
|---------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|
| 30th, 2016,<br>6 :30 – 9 :00<br>pm<br><br>Raven<br>Telemetry                                |                | machine learning<br>for mobile robots:<br>a reinforcement<br>approach<br><br>Prof. Howard<br>Schwartz<br><br>Systems and<br>Computer<br>Engineering<br><br>Carleton<br>University |       | Group                                      |
| Thursday<br>June 9,<br>2016, 6 :30<br>– 8 :00 pm<br><br>Algonquin<br>College,<br>Building P | Technical (DL) | Agent-based<br>Collaborative<br>Technologies and<br>Systems<br><br>Dr. Weiming Shen<br>(IEEE SMC DL)<br><br>National Research<br>Council                                          | 9/20  | N/A                                        |
| Wednesday,<br>August 3,<br>2016<br><br>Raven<br>Telemetry                                   | Technical (DL) | The State of the<br>Art of<br>Neurodynamic<br>Optimization -<br>Past, Present, and<br>Prospect<br><br>Prof. Jun Wang<br>(IEEE CIS DL)<br><br>City University of<br>Hong Kong      | 12/30 | Ottawa Machine<br>Learning Meetup<br>Group |
| September<br>19, 7:00 –<br>9 :00 PM<br><br>Raven<br>Telemetry                               | Technical      | Catching Bad<br>Guys with Math<br><br>Stephan Jou<br>CTO of Intersect                                                                                                             | 12/56 | Ottawa Machine<br>Learning Meetup<br>Group |

### Best Practices

Have students involved in the meeting and choose venues accessible to them. Advertise early and often for the events via e-Notices and the Ottawa Section newsletter.

### Awards and/or Recognitions

The chapter received 200 USD in funding from IEEE CIS to organize student events. A free pizza lunch with University of Ottawa students was organized during the visit of Jim Bezdek, CIS DL, to encourage

## IEEE Ottawa Section Report to the AGM 2016

student participation and membership development.

### List of unique events held, sponsored or organized such as symposia, conferences, educational programs, job fairs, competitions etc.

The Chapter is a proud sponsor of the Sixth Canadian Tracking and Fusion Group Workshop (CTFG Workshop 2016) which will be held in Ottawa on October 24-25, 2016 (<http://www.ctfg.ca/workshop2016>). The Chapter also held 3 DLs (2 from CIS and 1 from CIS), one more above what it had planned for last year.

This year, the Chapter started working together with the Ottawa Machine Learning Meetup Group (<https://www.meetup.com/Machine-Learning-Ottawa/>) to co-sponsor and publicize joint activities. This has led to a wonderful synergy between the two groups. We provide high-quality speakers, including IEEE CIS/SMC DLs, and the Meetup Group is able to host the technical talks and contribute to a light dinner through its increasing number of sponsors.

### List of proposed unique events that are to be held next year

The Chapter is planning on holding at least 10 talks next year, two of which will be DLs.

The Chapter is again hoping to technically co-sponsor local events and conferences that are in the domain of the CI/SMC societies.

There is an ongoing initiative to create a CIS student chapter within the University of Ottawa Student Branch which shall come to fruition towards the beginning of 2017.

Finally, the Chapter intends to organize a Machine Learning Day in 2017 with the Ottawa Machine Learning Meetup Group to increase awareness of this area among students from the University of Ottawa, Carleton University and Algonquin College.

## CompSoc – Computer Society

Chair: Rami Abielmona, Ph.D., P.Eng., SMIEEE, [rabiemo@ieee.org](mailto:rabiemo@ieee.org)

Vice Chair: Eric Karmouch, Ph.D., [ekarmouch@ieee.org](mailto:ekarmouch@ieee.org)

Vice Chair: Dan Ionescu, Dr. Eng., P.Eng., [ionescu@site.uottawa.ca](mailto:ionescu@site.uottawa.ca)

Website: <http://www.ieeeottawa.ca/cs>

| Activity Date, Time, Location                      | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                   | Attendance IEEE/Total | Joint Activity Sponsors             |
|----------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------|
| October 7, 2015, 10:00-11:30, University of Ottawa | DL Talk                                                               | "Learning in Non-Stationary Environments" by Dr. Cesare Alippi, Professor, Politecnico di Milano | 10/16                 | CI/SMC, IMS, EMBS, RAS/CSS chapters |
| November 17, 2015,                                 | Canadian Tracking and Fusion Group                                    | "The Coming Flood of Earth                                                                       | 8/33                  | CIS11/SMC28 chapter                 |

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|                                                                 |                                           |                                                                                                                                                                       |       |                                                |
|-----------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------|
| 10:00-11:00,<br>Shaw Centre                                     | (CTFG) Workshop<br>2015 Technical<br>Talk | Observation Data:<br>Challenges and<br>Opportunities” by<br>Dr. Maria Rey,<br>Space Strategies<br>Consulting Ltd                                                      |       |                                                |
| November<br>17, 2015,<br>11:20-12:05,<br>Shaw Centre            | CTFG Workshop<br>2015 Technical<br>Talk   | “Data Fusion in the<br>hierarchy of<br>sensors dedicated<br>to the Surveillance<br>of Canada’s<br>borders” by Major<br>(R) Marc Fricker,<br>Canadian Space<br>Society | 8/33  | CIS11/SMC28<br>chapter                         |
| November<br>17, 2015,<br>14:15-15:00,<br>Shaw Centre            | CTFG Workshop<br>2015 Technical<br>Talk   | “Performance of<br>the SAR-AIS<br>Association<br>System in Polar<br>Epsilon” by Dr.<br>Paris Vachon,<br>DRDC                                                          | 8/33  | CIS11/SMC28<br>chapter                         |
| November<br>17, 2015,<br>15:25-16:10,<br>Shaw Centre            | CTFG Workshop<br>2015 Technical<br>Talk   | “The evolution of<br>space based<br>maritime<br>surveillance in<br>Canada - a<br>commercial<br>perspective” by<br>William Jefferies,<br>LOOKNorth                     | 8/33  | CIS11/SMC28<br>chapter                         |
| December 9,<br>2015, 9:30-<br>12:30,<br>University of<br>Ottawa | DL Talk                                   | “Every picture tells<br>a story: visual<br>cluster assessment<br>and rectangular<br>relational data” by<br>Dr. James Bezdek,<br>Retired Professor                     | 11/13 | CIS11/SMC28;<br>IM09 chapters                  |
| April 19,<br>2016, 18:30-<br>20:30,<br>University of<br>Ottawa  | DL Talk                                   | “Granular<br>Computing:<br>Pursuing New<br>Avenues of<br>Computational<br>Intelligence” by Dr.<br>Witold Pedrycz,<br>Professor,<br>University of<br>Alberta           | 9/17  | CIS11/SMC28,<br>IM09,<br>CS23/RA24<br>chapters |
| July 28,<br>2016, 13:00-<br>15:00,<br>Carleton<br>University    | Technical Talk                            | “Personalized<br>healthcare by<br>control engineering<br>approaches” by Dr.<br>Levente Kovács,<br>Associate                                                           | 4/12  | CIS11/SMC28,<br>EMB18, IM09<br>chapters        |

|                                                  |         |                                                                                                                                           |       |                                                                                        |
|--------------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------|
|                                                  |         | Professor, Obuda University                                                                                                               |       |                                                                                        |
| August 3, 2016, 19:00-21:00, Carleton University | DL Talk | "The State of the Art of Neurodynamic Optimization: Past, Present, and Prospect" by Dr. Jun Wang, Professor, City University of Hong Kong | 12/30 | CIS11/SMC28, RAS/CSS and IM09 chapters as well as Ottawa Machine Learning Meetup group |

**Unique events:**

The Computer Society Ottawa Chapter co-sponsored the CTFG Workshop 2015 (held November 17-18, 2015 at the Shaw Centre) which was well attended, with more than 50 participants from government, industry, and academia. The workshop was made available by the generous financial support of the IEEE Ottawa Section, the International Society of Information Fusion (ISIF), and some local companies. More information about CTFG Workshop 2015 can be found on the website at [www.ctfg.ca](http://www.ctfg.ca).

**Proposed events:**

The Chapter is again co-sponsoring the CTFG Workshop 2016 (to be held October 24-25, 2016 at the Shaw Centre) and is planning to host a multitude of technical and DL talks.

The Chapter has also launched, in partnership with March Networks, a new IEEE Lunch and Learn initiative that will bring technical talks to the Kanata Tech Hub. This effort is being led by our Vice-Chair, Dr. Eric Karmouch.

***ComSoc, BTS, & CES- Joint Chapter of Communications Society, Broadcast Technology Society and Consumer Electronics Society***

Chair: Wahab Almuhtadi, [almuhtadi@ieee.org](mailto:almuhtadi@ieee.org)  
 Vice Chair: Claude Brulé, [brulec@algonquincollege.com](mailto:brulec@algonquincollege.com)  
 Secretary: Raed Abdullah, [RaedAbdullah@ieee.org](mailto:RaedAbdullah@ieee.org)  
 Membership Development: [tkhoury@ieee.org](mailto:tkhoury@ieee.org)  
 Joint Chapter: 1. Communications Society (ComSoc)  
 2. Consumer Electronics Society ((CESoc)  
 3. Broadcast Technology Society (BTS)

Total Number of Technical Meetings:

This Year            5

## IEEE Ottawa Section Report to the AGM 2016

Last Year \_\_\_\_\_10\_\_\_\_\_

| Activity Date, Time, Location                                           | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                                                                                                            | Attendance IEEE/Total | Joint Activity Sponsors                                                                                                                                                          |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feb 4, 2015<br>Algonquin College, Ciena-Optophotonics Lab (Room T129)   | Technical                                                             | An overview of the Build in Canada Innovation Program (BCIP)<br><br>Speaker:<br>Helen Bratier,<br>PWGSC, Government of Canada, Ottawa Canada                                                              | 10/16                 | ComSoc/CESoc/BTS Joint Chapter, EMBS, PES Chapter, CI/SMC Joint Chapter, CS, RS/PELS Joint Chapter, AICN Group, WIE Group, EdA, and ACS Branch, and Joint with Algonquin College |
| Mar 20, 2015.<br>Carleton University                                    | Technical                                                             | Challenges in the Next Wave of Connectivity<br><br>Speaker: Dr. Patrice Gamand, Ph.D<br>RF Fellow and Technology Manager<br>Corporate CTO office, NXP Semiconductors.                                     | 12/20                 | CASS/EDS/SSC Joint Chapter, ComSoc/CESoc/BTS Joint Chapter, CPMT Chapter, and joint with Carleton University                                                                     |
| Mar 26, 2015.<br>Carleton University                                    | Technical                                                             | Challenging Problems and Opportunities in Semiconductors and Microsystems<br><br>Speaker: Kenneth D. Wagner<br>ITAC Semiconductor Microsystems Council Chairman, Distinguished Engineer, PMC-Sierra, Inc. | 10/16                 | CASS/EDS/SSC Joint Chapter, ComSoc/CESoc/BTS Joint Chapter, CPMT Chapter, EMC Chapter, CS Chapter, RAS/CSS Joint Chapter, and joint with Carleton University                     |
| Mar 30, 2015.<br>Algonquin College, Ciena-Optophotonics Lab (Room T129) | Technical DL                                                          | Self-Organizing Small Cell Networks<br><br>Speaker:<br>Dr. Ekram Hossain,<br>University of Manitoba, Winnipeg                                                                                             | 19/31                 | ComSoc/CESoc/BTS Joint Chapter, EDS/SSCS/CASS Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, EdA, IEEE Ottawa Section                                                        |
| April 16, 2015<br>Algonquin College,                                    | Technical                                                             | Applications of Petri Nets in Communications - Calculation of Probability                                                                                                                                 | 13/16                 | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL                                                                                                                                 |

|                                                                                                              |           |                                                                                                                                                                                                                                                                                       |     |                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Ciena-<br>Optophotonics<br>Lab (Room<br>T129)                                                                |           | Distributions of<br>Performance Variable in<br>Petri Net Models<br><br>Speaker:<br>Dr. Faruk Hadziomerovic,<br>Independent Consultant,<br>Ottawa, ON, Canada                                                                                                                          |     | Joint Chapter, PES<br>Chapter, EdA, ACS<br>Branch, and joint with<br>Algonquin College                                                           |
| May 11-15<br>2015<br>Shaw Centre,<br>Ottawa, ON,<br>Canada                                                   |           | IFIP/IEEE International<br>Symposium on Integrated<br>Network Management<br>2015 (IM 2015)                                                                                                                                                                                            | 500 | Co-sponsorship:<br>IEEE<br>Communications<br>Society, IEEE Ottawa<br>Section, and IEEE<br>ComSoc Ottawa<br>Chapter                               |
| Thursday<br>November 12,<br>2015<br>Algonquin<br>College,<br>Ciena-<br>Optophotonics<br>Lab (Room<br>T129)   | Technical | Agility for an App-centric<br>Network - Integrated<br>Management of Software<br>Defined Infrastructure<br><b>Speaker DL:</b> Prof.<br>Bhaskar D. Rao, University<br>of California, San Diego,<br>USA                                                                                  |     | ComSoc/BT/CE Joint<br>Chapter, EMBS<br>Chapter, RS/PEL<br>Joint Chapter, PES<br>Chapter, EdA, ACS<br>Branch, and joint with<br>Algonquin College |
| Wednesday<br>November 18,<br>2015.<br>Algonquin<br>College,<br>Ciena-<br>Optophotonics<br>Lab (Room<br>T129) |           | Terrestrial broadcast vs.<br>LTE-eMBMS: Competition<br>and cooperation<br><b>Speaker DL:</b> Marco<br>Breiling, IEEE BTS<br>distinguished lecturer,<br>Chief scientist of the<br>broadband & broadcast<br>Fraunhofer Institute for<br>Integrated Circuits (IIS),<br>Erlangen, Germany |     | ComSoc/BT/CE Joint<br>Chapter, EMBS<br>Chapter, RS/PEL<br>Joint Chapter, PES<br>Chapter, EdA, ACS<br>Branch, and joint with<br>Algonquin College |
| Thursday<br>November 26,<br>2015<br>Algonquin<br>College,<br>Ciena-<br>Optophotonics<br>Lab (Room<br>T129)   |           | SDN/NFV Technology<br>Trends and Academic<br>Research in<br>Canada<br><b>Speaker:</b> Chris Bachalo,<br>CTO Juniper Networks<br>Canada                                                                                                                                                |     | ComSoc/BT/CE Joint<br>Chapter, EMBS<br>Chapter, RS/PEL<br>Joint Chapter, PES<br>Chapter, EdA, ACS<br>Branch, and joint with<br>Algonquin College |
| March 18,<br>2016<br>University of<br>Ottawa                                                                 |           | Joint Symposium on<br>Optical Communications<br><b>Speakers:</b><br>- Prof. Dan M. Marom,<br>Hebrew University.<br>- Maurice O'Sullivan,<br>Ciena                                                                                                                                     |     | PHOS Chapter,<br>APP/MTTS Joint<br>Chapter,<br>and<br>ComSoc/CESoc/BTS<br>Joint Chapter                                                          |

## IEEE Ottawa Section Report to the AGM 2016

|                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                  |     |                                                                                                                                                       |
|--------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                      |  | - Siegfried Janz, NRC                                                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                       |
| Tuesday April 5, 2016.<br>Algonquin College,<br>Ciena-Optophotonics Lab (Room T129)  |  | IEEE Standards Development Ecosystem and ComSoc Standards and Standards-related Activities<br><b>Speakers:</b><br>Dr. Alexander D. Gelman, Director - Standardization Programs Development, ComSoc                                                                                                                                               |     | ComSoc/BT/CE Joint Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College                                      |
| Wednesday June 8, 2016.<br>Algonquin College,<br>Ciena-Optophotonics Lab (Room T129) |  | Seeing with Diamond: from Quantum Photonics to Bionics Eyes<br><b>Speaker:</b> Steven Prawer, School of Physics, University of Melbourne, Parkville, 3010, Australia, *s.prawer@unimelb.edu.au                                                                                                                                                   | 5/7 | PHOS Chapter, ComSoc/BT/CE Joint Chapter, RS/PEL Joint Chapter, EMBS Chapter, AICN Affinity Group), EdA, ACS Branch, and joint with Algonquin College |
| Thursday, July 14, 2016<br>University of Ottawa                                      |  | Topic 1: Recent Progress in Microwave Antenna Precision Measurement at National Institute of Metrology (NIM) of China<br>Topic 2: Quantum Based Self-traceable RF E-field Sensing by Using Rydberg States<br><b>Speaker:</b> Dr. Zhenfei Song, EMC Laboratory, Information & Electronic Division, National Institute of Metrology (NIM) of China |     | AP/MTT Joint Chapter, EMC Chapter, Chapter, ComSoc/BT/CE Joint Chapter, and School of Electrical Engineering and Computer Science                     |
| Thursday July 21, 2016<br>Algonquin College,<br>Ciena-Optophotonics Lab (Room T129)  |  | IoT impact on the future of Healthcare and Wellness<br><b>Speaker:</b> Fawzi Behmann, President TelNet Management Consulting, Inc.                                                                                                                                                                                                               |     | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College                        |

List of unique events held, sponsored or organized

## ***IEEE Ottawa Section Report to the AGM 2016***

The IEEE Ottawa Section and the IEEE Ottawa ComSoc / CESoc / BTS Joint Chapter hosted the 2015 IFIP/IEEE International Symposium on Integrated Network Management (IM 2015) in Ottawa, Ontario, Canada at the Ottawa Shaw Centre on May 11 - May 15, 2015.

The IM 2015-Ottawa attracted and brought together the world's industry leaders, scientists, academics, engineering professionals, policy makers, and government officials to the presentations of keynotes, panels, technical papers, workshops, tutorials, and mini-conferences. For participants, it stimulated the scientific exchange of ideas, the identification of future trends in communications, and the illumination of business opportunities.

### **List of proposed unique events that are to be held:**

Ottawa ComSoc/BTS/CES Joint Chapter is the winner of the 2016 Communications Society Chapter Achievement Award (2016 CAA):

On Friday, July 8, 2016, IEEE Communications Society has announced that IEEE Ottawa ComSoc/BTS/CES Joint Chapter is the winner of the 2016 Communications Society Chapter Achievement Award (2016 CAA) in North America Region (R1-R7). This is for the second time, the Ottawa ComSoc/BTS/CES Joint Chapter was the winner the Chapter Achievement Award in 2010. Also, the chapter was the winner of the Chapter of the Year 2010 Award.

On Dec. 6, 2016, the IEEE Communications Society will present the Award plaque to the Ottawa Chapter at the GLOBECOM 2016 Awards Luncheon, in Washington DC, USA.

## ***CPMT –Components, Packaging and Manufacturing Technology Society***

Chair: Qi-Jun Zhang, [gjz@doe.carleton.ca](mailto:gjz@doe.carleton.ca)

Total Number of Technical Meetings:

This Year          5     (Oct 2015 - Oct 2016)  
 Last Year          7     (Oct 2014 – Oct 2015)

| Activity Date, Time, Location         | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                 | Attendance IEEE/Total | Joint Activity Sponsors |
|---------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------|-----------------------|-------------------------|
| January 22, 2016, Carleton University | Technical meeting                                                     | Wonderful World of Nonlinearity: Modeling and Characterization | 12/30                 | CPMT, AP/MTT, EMC       |

## IEEE Ottawa Section Report to the AGM 2016

|                                    |                   |                                                                                                                               |       |                                   |
|------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------|
|                                    |                   | of RF and Microwave Circuits/Prof. Jose Pedro                                                                                 |       |                                   |
| March 30, 2016, Fidus Systems      | Technical meeting | Electromagnetic Environmental effects in Tactical Communication Systems/Dr. Kris Hatashita                                    | 8/23  | EMC, AP/MTT, CPMT                 |
| May 16, 2016 Fidus Systems         | Technical meeting | Preventing RFIC interference issues: floorplan development, isolation- and grounding strategy/Dr. Jan Niehof                  | 5/9   | EMC, AP/MTT, CPMT                 |
| May 25, 2016 Fidus Systems         | Technical meeting | Seeing is Believing, Demonstration data showing three EMC Concepts/Dr. Scott Piper                                            | 5/9   | EMC, AP/MTT, CPMT                 |
| July 14, 2016 University of Ottawa | Technical meeting | Recent Progress in Microwave Antenna Precision Measurement at National Institute of Metrology (NIM) of China/Dr. Zhenfei Song | 12/25 | AP/MTT, EMC, CPMT, ComSoc/BTS/CES |

### ***DEIS – Joint Ottawa-Montreal Chapter of Dielectrics and Electrical Insulation Society***

Chair: Refat Ghunem, [refat.ghunem@nrc-cnrc.gc.ca](mailto:refat.ghunem@nrc-cnrc.gc.ca)  
 Vice Chair: Dr. Eric David  
 Website: <http://www.ieeeottawa.ca/officers/chapters>

| Activity Date, Time, | Activity Type (Tech Meeting, Workshop, | Title/Speaker or Workshop Name | Attendance IEEE/Total | Joint Activity Sponsors |
|----------------------|----------------------------------------|--------------------------------|-----------------------|-------------------------|
|----------------------|----------------------------------------|--------------------------------|-----------------------|-------------------------|

## IEEE Ottawa Section Report to the AGM 2016

| Location   | DL, etc) and Brief Description |                       |      |  |
|------------|--------------------------------|-----------------------|------|--|
| 13-Jan-16  | Tech                           | Dr. Maher Abdelkhalek | 2/22 |  |
| 25-May-16  | Tech                           | Prof. Eric David      | 1/22 |  |
| 19-July-16 | Tech                           | Dr. Refat Ghunem      | 2/30 |  |
| 07-Sep-16  | Tech                           | Amr Said              | 2/22 |  |
| 21-Sep-16  | Tech                           | Dr. Yazid Hadjadj     | 2/10 |  |

### ***EDS, CAS, & SSCS – Joint Chapter of Electron Devices Society, Circuits and Systems Society, and Solid-State Circuits Society***

Chair: Ram Achar, [achar@doe.carleton.ca](mailto:achar@doe.carleton.ca)

Vice Chair: Dr. Ihsan Erdin, [erdinih@gmail.com](mailto:erdinih@gmail.com)

Website: [www.doe.carleton.ca/~achar](http://www.doe.carleton.ca/~achar)

Joint Chapter: 1. Circuits and Systems Society  
2. Solid State Circuits Society  
3. Electronic Devices Society

Total Number of Technical Meetings:

6 Technical Talks (out of which **2 were DLs**)

This Year (2015: Jan- Oct)        2  

### **IEEE Ottawa CASS/EDS/SSC Activity Report (Nov. 6 2015 – Sept. 30 2016)**

#### **Synopsis**

The CASS/EDS/SSC joint chapter of Ottawa has been active in organizing and promoting the events/activities of importance to the Ottawa IEEE members. During the last 12 months, it arranged a total of 6 Technical Talks (out of which 2 were DLs). Typical attendance for the talks ranged between 10 to 60 or higher. In addition, one CASS administrative meeting and additional meetings with the student volunteers were held.

*Major accomplishments of the chapter include several recognitions for its leadership/activities by the CAS (Circuits and Systems) **CASS Subsidy Grant of US\$2500.***

*In addition, a high-quality website for the CASS/EDS/SSCS joint chapter has been developed ([http://www.ieeeottawa.ca/eds\\_cas\\_sscs/](http://www.ieeeottawa.ca/eds_cas_sscs/))*

Following is a list of major talks arranged by the chapter during the past year

| # | Date/Place                             | Activity Type               | Title/Speaker                                                                                                                                                                                 | Attendance IEEE/Total | IEEE Society/ Joint Sponsors                           |
|---|----------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------|
| 1 | Oct. 29 2015.<br>(Carleton University) | Technical<br><b>SSCS DL</b> | Cognitive Radio Transceiver Chips<br><br><b>Speaker:</b> Eric Klumperink<br><br>Professor, Uni of Twente, Netherlands                                                                         | 14/22                 | <b>CASS/EDS/SSC,</b><br>Joint with Carleton University |
| 2 | Nov. 16, 2015<br>(Carleton University) | Technical                   | Spatio-Temporal Electromagnetic Wave Engineering for Tomorrow's Radio using Phasers, Metasurfaces and Metamaterials<br><br><b>Speaker:</b> Dr. Shulabh Gupta, Ecole Polytechnique de Montreal | 18/25                 | <b>CASS/EDS/SSC,</b><br>Joint with Carleton University |
| 3 | Nov. 25, 2015<br>(Carleton University) | Technical                   | Integration Techniques for Millimeter-Wave Imaging and Sensing Systems <b>Speaker:</b> Dr. Tarek Dejrafi, Ecole Polytechnique de Montreal                                                     | 14/19                 | <b>CASS/EDS/SSC,</b><br>Joint with Carleton University |
| 4 | Dec. 15, 2015<br>(Carleton University) | Technical                   | Hybrid Plasmonics: Applications in Integrated Optics and Sensing<br><br><b>Speaker:</b> Dr. Mo Mojahedi<br><br>Dept. of ECE, University of Toronto, ON                                        | 8/14                  | <b>CASS/EDS/SSC,</b><br>Joint with Carleton University |
| 5 | Jan. 15, 2016<br>(Carleton University) | Technical<br><b>SSCS DL</b> | CMOS Transceiver Circuits for Short-Reach Optical                                                                                                                                             | 12/21                 | <b>CASS/EDS/SSC,</b><br>Joint with Carleton            |

|   |                                               |                |                                                                                                                                                                         |       |                                                              |
|---|-----------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------|
|   | University)                                   |                | Communication<br><br><b>Speaker:</b> Dr. Tony Chan<br>Caurosone<br><br>City Toronto<br><br>Dept. of ECE, University of<br>Toronto, ON                                   |       | University                                                   |
| 6 | Jan. 22,<br>2016<br>(Carleton<br>University)  | Technical      | Metasurfaces for Energy<br>Harvesting and Far-Field<br>Wireless Power Transfer<br><br><b>Speaker:</b> Dr. Omar M. Ramahi<br><br>Dept. of ECE, University of<br>Waterloo | 12/20 | <b>CASS/EDS/SSC,</b><br>Joint with<br>Carleton<br>University |
| 7 | Sept. 19,<br>2016<br>(Carleton<br>University) | Administrative | IEEE Ottawa CAS/EDS/SSCS<br>Officers Meeting                                                                                                                            | 2/2   | CASS/EDS/SSC                                                 |
| 8 | Jan . 1<br>2016- Sept.<br>1, 2016)            | Administrative | IEEE Ottawa CAS/EDS/SSCS<br>Officers with Students for<br>Mentoring, to develop the<br>new website)                                                                     | 2/5   | CASS/EDS/SSC                                                 |

### **Best Practices**

The chapter recognizes the importance of

- engaging its members,
  - attracting new members,
  - providing high-quality forums for technical/professional interactions,
  - the need for attracting students into the IEEE activities as well as appropriately mentoring them;
- and accordingly bases its activities.

## IEEE Ottawa Section Report to the AGM 2016

### Awards and/or Recognitions

Major accomplishments of the chapter include several recognitions for its leadership/activities by the CAS (Circuits and Systems) and SSCS (Solid State Circuits) Societies:

- A CASS Chapter Subsidy Grant of \$2500 grant in recognition of the leadership provided by the Ottawa chapter and to further develop IEEE and CASS activities in Ottawa.

### EMC – Electromagnetic Compatibility Society

Chair: Syed Bokhari,

Email: [bokhari@ieee.org](mailto:bokhari@ieee.org)

Vice Chair: Qiubo Ye,

Email: [qiubo.ye@crc.gc.ca](mailto:qiubo.ye@crc.gc.ca)

Website: <http://www.ieeeottawa.ca/emcs>

| Activity Date, Time, Location                                                  | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                                                                                                                             | Attendance IEEE/Total | Joint Activity Sponsors |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|
| November 10, 2015<br>FIDUS SYSTEMS Inc., 375 Terry Fox Dr. Ottawa, ON, K2K 0J8 | DL                                                                    | Professor Ram Achar, Demystifying Signal Integrity in High Speed Designs                                                                                                                                                   | 7/12                  | AP/MTT and CPMT         |
| March 30, 2016,<br>FIDUS SYSTEMS Inc., 375 Terry Fox Dr. Ottawa, ON, K2K 0J8   | Technical meeting                                                     | Mr. Kris Hatashita, EMC Expert, Director General Land Equipment Program Management<br><br>Topic : Electromagnetic Environmental effects in Tactical Communication Systems                                                  | 8/15                  | AP/MTT and CPMT         |
| May 16, 2016,<br>FIDUS SYSTEMS Inc., 375 Terry Fox Dr. Ottawa, ON, K2K 0J8     | DL                                                                    | Dr. Jan Niehof, BU Automotive – BL Car Infotainment & Driver Assistance, NXP Semiconductors, The NETHERLANDS<br><br>Topic : Preventing RFIC interference issues: floorplan development, isolation- and grounding strategy" | 9/4                   | AP/MTT and CPMT         |
| May 25, 2016<br>FIDUS SYSTEMS Inc., 375 Terry Fox                              | DL                                                                    | Mr. Scott Piper, EMC Specialist, General Motors, Dearborn Michigan                                                                                                                                                         | 9/5                   | AP/MTT and CPMT         |

## IEEE Ottawa Section Report to the AGM 2016

|                            |  |                                                                                   |  |  |
|----------------------------|--|-----------------------------------------------------------------------------------|--|--|
| Dr. Ottawa, ON,<br>K2K 0J8 |  | Topic : Seeing is Believing –<br>Demonstration data showing<br>three EMC Concepts |  |  |
|----------------------------|--|-----------------------------------------------------------------------------------|--|--|

### List of unique events held, sponsored or organized

2016 International EMC Symposium was Held in Ottawa from July 25-29, 2016.

Qiubo Ye was the VICE General Chair, and Syed Bokhari was the co-chair of Technical Papers Committee.

Both received certificates of recognition and conference was a success equaling or exceeding recent conferences in terms of revenue, attendance and number of papers.

### List of proposed unique events

Not known yet

## EMBS – Engineering in Medicine and Biology Society

Chair: Sreeraman Rajan, Ph.D. SMIEEE, [sreeraman@ieee.org](mailto:sreeraman@ieee.org)

Vice-Chair: James Green, Ph.D. SMIEEE, [jrgreen@sce.carleton.ca](mailto:jrgreen@sce.carleton.ca)

Secretary: Yuu Ono, Ph.D. SMIEEE, [yuuno@sce.carleton.ca](mailto:yuuno@sce.carleton.ca)

Webmaster: Adrian Chan, Ph.D. SMIEEE, [adcchan@sce.carleton.ca](mailto:adcchan@sce.carleton.ca)

Treasurer: Dr. Andrew Law

Website: <http://www.embs.ieeeottawa.ca/index.php>

Total Number of Technical Meetings:

|           |    |
|-----------|----|
| This Year | 16 |
| Last Year | 15 |

| Activity Date, Time, Location         | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name           | Attendance IEEE/Total | Joint Activity Sponsors |
|---------------------------------------|-----------------------------------------------------------------------|------------------------------------------|-----------------------|-------------------------|
| 26/09/2016<br>1:00:00 PM,<br>Carleton | Technical                                                             | Modeling respiratory motion in radiation | 3/34                  | No                      |

|                                                       |           |                                                                                       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| University                                            |           | therapy/Dr. Emily Heath                                                               |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 28/07/2016<br>1:00:00 PM,<br>Carleton<br>University   | Technical | Personalized healthcare<br>by control engineering<br>approaches/Dr. Levente<br>Kovács | 4/12  | Instrumentation and<br>Measurement<br>Society, Joint<br>Societies of<br>Computational<br>Intelligence and<br>Systems, Man and<br>Cybernetics,<br>Computer Society                                                                                                                                                                                                                                                                                                                                                           |
| 21/07/2106<br>18:00:00<br>PM,<br>Algonquin<br>College | Technical | IoT impact on the<br>future of Healthcare<br>and Wellness/Fawzi<br>Behmann            | 27/16 | The IEEE Ottawa,<br>IEEE Ottawa Joint<br>Chapter of<br>Communications<br>Society, Consumer<br>Electronics Society,<br>and Broadcast<br>Technology Society<br>(ComSoc/CESoc/BTS),<br>IEEE Ottawa<br>Engineering in<br>Medicine and Biology<br>Society (EMBS), IEEE<br>Ottawa Power and<br>Energy Society (PES),<br>IEEE Ottawa Joint<br>Chapter of Reliability<br>Society and Power<br>Electronics Society<br>(RS/PELS), IEEE<br>Ottawa Educational<br>Activities (EA), and<br>Algonquin College<br>Student Branch<br>(ACSB) |
| 08/06/2016<br>6:00:00 PM,<br>Algonquin<br>College     | Technical | Seeing with Diamond:<br>from Quantum<br>Photonics to Bionics<br>Eyes/Professor Steven | 5/12  | IEEE Ottawa Joint<br>Chapter Seminar:<br>Photonics Chapter,<br>ComSoc Chapter,<br>EMBS Chapter,                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                     |              |                                                                                                                                                                           |       |                                                                                 |
|-----------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------|
|                                                     |              | Prawer                                                                                                                                                                    |       | and ACN Group                                                                   |
| 30/05/2016<br>1:00:00 PM,<br>Carleton<br>University | Technical/DL | NANOTEXTURED<br>MICROFLUIDIC<br>SUBSTRATES<br>BIOMIMICKING<br>STRUCTURED<br>HIERARCHY OF LIVING<br>SYSTEMS /Dr. Samir<br>Iqbal                                            | 19/58 | Life Member Affinity,<br>Joint chapters of<br>TM/PC/SIT, IEEE<br>Ottawa Section |
| 30/05/2016<br>8:30:00 AM,<br>Carleton<br>University | Technical    | Plenary Talk: LEARNING<br>HOW TO LEARN:<br>Powerful mental tools<br>to help you master<br>tough subjects/Dr.<br>Barbara Oakley                                            | 46125 | Life Member Affinity,<br>Joint chapters of<br>TM/PC/SIT, IEEE<br>Ottawa Section |
| 25/05/2016<br>2:00:00 PM,<br>Carleton<br>University | Technical    | Large Area Electronic<br>Skin/Dr. Ravinder<br>Dahiya                                                                                                                      | 13/29 | Cosponsored by<br>EMBS, EMC, AESS<br>and VTS Chapters                           |
| 08/03/2016<br>1:00:00 PM,<br>Carleton<br>University | Technical    | Cognition in Action:<br>Using near infra-red<br>spectroscopy to study<br>changes in cerebral<br>oxygenation during<br>dual-task<br>performances/Professor<br>Sarah Fraser | 5/16  | No                                                                              |
| 09/02/2016<br>1:00:00 PM,<br>Carleton<br>University | Technical    | Infection Prevention<br>and Control<br>Considerations in<br>Medical Design for<br>Neonatal Intensive<br>Care/ Professor Chantal<br>Trudel                                 | 2/15  | No                                                                              |
| 02/02/2016<br>1:00:00 PM,                           | Technical    | Image Processing<br>Methods for                                                                                                                                           | 3/22  | No                                                                              |

|                                                    |              |                                                                                                                          |       |                                            |
|----------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|
| Carleton University                                |              | Applications in Medical Imaging: Towards Translating Personalized Biomarkers into Clinical Care/Professor Eranga Ukwatta |       |                                            |
| 27/11/2015<br>2:30:00 PM,<br>University of Ottawa  | Technical    | Silicon nitride and Indium Tin Oxide Nanostructures for dielectrophoretic manipulation of biomolecules/Dr. Sara Mahshid  | 0/19  | No                                         |
| 17/11/2015<br>1:00:00 PM,<br>Carleton University   | Technical    | Real-time language processing using EEG measurements/Dr. Masako Hiratoni                                                 | 2/9   | No                                         |
| 12/11/2015<br>6:00:00 PM,<br>Algonquin College     | Technical    | Agility for an App-centric Network - Integrated Management of Software Defined Infrastructure/                           | 21/30 | ?                                          |
| 13/10/2015<br>1:00:00 PM,<br>Carleton University   | Technical    | Advanced Diagnostic and Therapeutic Applications of Biomedical Ultrasound/Dr. Sacha Nandlal                              | 4/11  | No                                         |
| 07/10/2015<br>10:00:00 AM,<br>University of Ottawa | Technical/DL | Learning in nonstationary environments/Dr. Cesare Alippi                                                                 | 10/16 | CI/SMC, CompSoc, IMS, RAS/CSS and chapters |
| 06/10/2015<br>1:00:00 PM,                          | Technical    | Engineering solutions to Cardiology problems: a                                                                          | 2/15  | No                                         |

## IEEE Ottawa Section Report to the AGM 2016

|                     |  |                                         |  |  |
|---------------------|--|-----------------------------------------|--|--|
| Carleton University |  | match made in Ottawa?/Dr. Calum Redpath |  |  |
|---------------------|--|-----------------------------------------|--|--|

### List of unique events held, sponsored or organized

International Student Conference 2016: May 29-31, 2016 that included educational program and competition. This was done with CU@EMBS student club which is the student club of the IEEE Ottawa EMBS chapter.

### IMS – Instrumentation and Measurement Society

Chair: Voicu Groza,

Email: [vgroza@ieee.org](mailto:vgroza@ieee.org)

Vice Chair: Branislav Djokic,

Email: [branislav@ieee.org](mailto:branislav@ieee.org)

| Activity Date, Time, Location            | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                           | Attendance IEEE/Total | Joint Activity Sponsors  |
|------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------|
| 03 Aug 2016 07:00 / University of Ottawa | DL Technical Talk                                                     | "The State of the Art of Neurodynamic Optimization - Past, Present, and Prospect" / Prof. Jung Wang, Hong Kong           | 18/30                 | COMPSOC, IMS, RAS        |
| 28 Jul 2016 01:00 / Carleton University  | DL Technical Talk                                                     | "Personalized healthcare by control engineering approaches" / Levente Kovacs, Obuda University, Hungary                  | 11/20                 | IM09, CompSoc, CIS, EMBS |
| 19 Apr 2016 06:30 / University of Ottawa | DL Technical Talk                                                     | "Granular Computing: Pursuing New Avenues of Computational Intelligence" / Witold Pedrycz, University of Alberta, Canada | 9/17                  | C16; IM09; CS23/RA24     |
| 09 Dec 2015 11:00 / University of Ottawa | DL Technical Talk                                                     | "Every picture tells a story: visual cluster assessment and rectangular relational data" / James Bezdek, Ottawa          | 11/3                  | C16; IM09                |

### List of unique events held:

## IEEE Ottawa Section Report to the AGM 2016

Members of the IMS Ottawa chapter contributed to the activity of the P-1721 standard project in the frame of the Instrumentation and Measurement Society's Technical Committee on Medical and Biological Measurements IMS TC-25.

### Photonics Society Chapter

Chair: Dr. Jianping Yao, [jpyao@site.uOttawa.ca](mailto:jpyao@site.uOttawa.ca)

Vice Chair: Dr. Winnie Ye, [winnie\\_ye@carleton.ca](mailto:winnie_ye@carleton.ca)

Treasurer: Dr. John Bernard, [John.Bernard@nrc-cnrc.gc.ca](mailto:John.Bernard@nrc-cnrc.gc.ca)

Past-Chairman: Kexing Liu, [kexing.liu@ieee.org](mailto:kexing.liu@ieee.org)

| Activity Date, Time, Location        | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description  | Title/Speaker or Workshop Name                                     | Attendance IEEE/Total | Joint Activity Sponsors                                                                                                                                    |
|--------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2016-06-08, Algonquin College        | Seeing with Diamond: from Quantum Photonics to Bionics Eyes            | Prof Steven Prawer                                                 | 12                    | Jointly with ComSoc, EMBS, ACN Chapters and Group                                                                                                          |
| 2016-01-13, Algonquin College        | "Unintentional Impacts of a LED Lighting" - Putting the Brakes on Hype | Robert Dick                                                        | 13                    | A joint IEEE Ottawa Photonics Chapter and IEEE Ottawa Alliance of Consultant Network Group Seminar, supported by the IEEE Algonquin College Student Branch |
| March 18, 2016, University of Ottawa | Joint Symposium on Optical Communications                              | Prof. Dan M. Marom<br>Dr. Maurice O'Sullivan<br>Dr. Siegfried Janz | 50                    | IEEE Ottawa Photonics Chapter and IEEE Ottawa Microwave Theory and Techniques Chapter                                                                      |

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |    |                      |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----|----------------------|
| 2016-03-07,<br>Algonquin<br>College               | Opportunities in<br>Photonics<br><br>The Ottawa<br>Photonics Chapter<br>past chair Dr<br>Kexing Liu, a<br>veteran in photonics<br>industry, will be<br>presenting to the<br>undergraduate<br>students major<br>in photonics at the<br>Carleton University<br>(Canada) about the<br>impacts of<br>photonics, the<br>future of photonics<br>and the carriers<br>opportunities in<br>photonics. This is a<br>technical as well as<br>outreach and<br>educational event. | Dr Kexing Liu  | 17 | Carleton University  |
| September<br>14, 2016,<br>University of<br>Ottawa | IEEE Ottawa<br>Advances in<br>Photonics Lecture<br>Series                                                                                                                                                                                                                                                                                                                                                                                                            | Prof. Bob Boyd | 50 | University of Ottawa |

**List of unique events held**

Photonics North 2016 (co-sponsor)

**List of proposed unique events**

Co-sponsor of Photonics North 2017

***PES – Power and Energy Society***

Chair: Wahab Almuhtadi, [almuhtadi@ieee.org](mailto:almuhtadi@ieee.org)

Vice Chair: Branislav Djokic, [branislav@ieee.org](mailto:branislav@ieee.org)

Website: <http://www.ewh.ieee.org/soc/pes/ottawa>

## IEEE Ottawa Section Report to the AGM 2016

Total Number of Technical Meetings:

This Year              7      

Last Year              5      

| Activity Date, Time, Location                                                          | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                                                                                                                                                             | Attendance IEEE/Total | Joint Activity Sponsors                                                                                                        |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| October 26-28, 2015, London, Ontario, Canada                                           | Conference Technical                                                  | Electrical Power & Energy Conference 2015 (EPC2015)<br><br>"SMARTER RESILIENT POWER SYSTEMS"                                                                                                                                                               | 200                   | Technical Co-sponsorship from PES Ottawa Chapter                                                                               |
| Thursday November 12, 2015<br>Algonquin College, Ciena-Optophotonics Lab (Room T129)   | Technical Technical                                                   | Agility for an App-centric Network - Integrated Management of Software Defined Infrastructure<br><b>Speaker DL:</b> Prof. Bhaskar D. Rao, University of California, San Diego, USA                                                                         |                       | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College |
| Wednesday November 18, 2015.<br>Algonquin College, Ciena-Optophotonics Lab (Room T129) | Technical                                                             | Terrestrial broadcast vs. LTE-eMBMS: Competition and cooperation<br><b>Speaker DL:</b> Marco Breiling, IEEE BTS distinguished lecturer, Chief scientist of the broadband & broadcast Fraunhofer Institute for Integrated Circuits (IIS), Erlangen, Germany |                       | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College |
| Thursday November 26, 2015<br>Algonquin College, Ciena-Optophotonics Lab (Room T129)   | Technical                                                             | SDN/NFV Technology Trends and Academic Research in Canada<br><b>Speaker:</b> Chris Bachalo, CTO Juniper Networks Canada                                                                                                                                    |                       | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College |
| Tuesday April 5, 2016.<br>Algonquin                                                    | Technical                                                             | IEEE Standards Development Ecosystem and ComSoc Standards                                                                                                                                                                                                  |                       | ComSoc/BT/CE Joint Chapter, RS/PEL Joint Chapter, PES                                                                          |

## IEEE Ottawa Section Report to the AGM 2016

|                                                                                      |                      |                                                                                                                                                                                                    |      |                                                                                                                                |
|--------------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------|
| College, Ciena-Optophotonics Lab (Room T129)                                         |                      | and Standards-related Activities<br><b>Speakers:</b><br>Dr. Alexander D. Gelman, Director - Standardization Programs Development, ComSoc                                                           |      | Chapter, EdA, ACS Branch, and joint with Algonquin College                                                                     |
| Thursday July 21, 2016<br>Algonquin College, Ciena-Optophotonics Lab (Room T129)     | Technical            | IoT impact on the future of Healthcare and Wellness<br><b>Speaker:</b> Fawzi Behmann, President TelNet Management Consulting, Inc.                                                                 |      | ComSoc/BT/CE Joint Chapter, EMBS Chapter, RS/PEL Joint Chapter, PES Chapter, EdA, ACS Branch, and joint with Algonquin College |
| Tuesday September 20, 2016<br>Algonquin College, Ciena-Optophotonics Lab (Room T129) | Technical            | Next Generation Photovoltaics<br><b>Speaker:</b><br>Dr. Karin Hinzer, Professor, Canada Research Chair Canada, SUNLAB, School of Electrical Engineering and Computer Science, University of Ottawa | 12/8 | PES Chapter, RS/PEL Joint Chapter, IAS Chapter, EdA, ACS Branch, and joint with Algonquin College                              |
|                                                                                      | Technical            | Tour of NRC Heavy Vehicle Testing Facility                                                                                                                                                         | 7/5  | RS/PEL Joint Chapter, PES Chapter                                                                                              |
| October 12-14, 2016, Ottawa, Ontario, Canada                                         | Conference Technical | Electrical Power & Energy Conference 2016 (EPC2016)<br><br>"SMARTER RESILIENT POWER SYSTEMS"                                                                                                       | 200  | Host and organizer by PES Ottawa Chapter<br>Technical Co-sponsorship from PES Ottawa Chapter                                   |
| October 22-24 2017, Saskatoon, SK, Canada                                            | Conference Technical | Electrical Power & Energy Conference 2017 (EPC2017)<br><br>"Advanced Technologies for Renewable Energy Systems and Smart Grids"                                                                    | 200  | Technical Co-sponsorship from PES Ottawa Chapter                                                                               |

## RAS & CSS – Joint Chapter of Robotics & Automation and Control Systems Societies

Chair: Jurek Sasiadek, [jsas@ccs.carleton.ca](mailto:jsas@ccs.carleton.ca)

Vice Chair: Marek Zaremba, [Marek.Zaremba@uqo.ca](mailto:Marek.Zaremba@uqo.ca)

## IEEE Ottawa Section Report to the AGM 2016

| Activity Date, Time, Location | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description                              | Title/Speaker or Workshop Name          | Attendance IEEE/Total                     | Joint Activity Sponsors    |
|-------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------|----------------------------|
| August 3, 2016                | Technical Meeting "The State of the Art of Neurodynamic Optimization: Past, Present, and Prospect" | Prof. Jun Wang, Univ. of Hong-Kong      | <b>Place:</b> Raven Telemetry , 25/15     | RAS/CSS, CM/SMC, ComSoc,IM |
| April 19, 2016                | Technical Meeting " Fuzzy Logic Systems"                                                           | Prof. Witold Pedrycz, Univ. of Alberta  | <b>Place:</b> University of Ottawa, 37/12 | RAS/CSS, CM/SMC            |
| March 26, 2016                | Technical Meeting "Fire Detection Robot Using Interval-valued Dempster-Shafter Fusion Method "     | Ms. Ying Dong, U of O                   | <b>Place:</b> University of Ottawa, 18/6  | RAS/CSS                    |
| October 7, 2016               | Technical Meeting "A new allocation method for over-actuated robotic space systems".               | Ms. Helene Evain, SuperAero, - Toulouse | Place: Carleton University                | RAS/CSS                    |

### ***R-PEL – Reliability Society & Power Electronics Society Joint Ottawa Chapter (R-PEL)***

Chair: Raed Abdullah, [RaedAbdullah@ieee.org](mailto:RaedAbdullah@ieee.org)

Co-vice chair: Xiaoyu (Kevin) Wang, [xiaoyuw@doe.carleton.ca](mailto:xiaoyuw@doe.carleton.ca)

Co-vice chair: Tanya Gachovska, [tgachovska@yahoo.com](mailto:tgachovska@yahoo.com)

| Activity Date, Time, Location                                                                               | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                                                                           | Attendance IEEE/Total | Joint Activity Sponsors                                                                                                     |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Tuesday September 20, 2016, 6PM-8PM, Algonquin College, 1385 Woodroffe Ave., School of Advanced Technology, | Seminar                                                               | Next Generation Photovoltaics by Dr. Karin Hinzer, Professor, Canada Research Chair Canada, SUNLAB, School of Electrical Engineering and Computer Science, University of | 12/20                 | Reliability Society & Power Electronics Society Joint Ottawa Chapter (R-PEL); Vehicular Technology Society (VTS); Power and |

|                                                                                                                                                             |                       |                                                                                                                                                                          |       |                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| T-Building, Ciena-Optophotonics Lab (Room T129)                                                                                                             |                       | Ottawa                                                                                                                                                                   |       | Energy Society (PES; Instrumentation and Measurement Society (IMS); Educational Activities, and Algonquin College IEEE Student Branch                                                                                                    |
| Friday, May 27, 2016, 12PM-2PM, 2320 Lester Rd                                                                                                              | Field Technical Visit | Tour of NRC Heavy Vehicle Testing Facility by Bruce Playfair                                                                                                             | 5 / 8 | Reliability Society & Power Electronics Society Joint Ottawa Chapter (R-PEL); Vehicular Technology Society (VTS); Power and Energy Society (PES); Industry Applications Society (IAS); and Instrumentation and Measurement Society (IMS) |
| Thursday, January 29, 2015, 6PM-8PM, Algonquin College, 1385 Woodroffe Ave., School of Advanced Technology, T-Building, Ciena-Optophotonics Lab (Room T129) | Seminar               | Modeling in Power Electronics - Comparison of the Forward Voltage Drop of Si and SiC High Voltage Diodes by Dr. Tanya K. Gachovska, Solantro Semiconductor Corp., Ottawa | 10/14 | IEEE Ottawa Section RS-PEL, PES, IMS, Educational Activities, and Algonquin College IEEE Student Branch                                                                                                                                  |

### Best Practices

Providing value to the members by teaming with symbiotic chapters and affinities.

## ***IEEE Ottawa Section Report to the AGM 2016***

### **List of unique events held**

Sponsoring the IEEE Electrical Power and Energy Conference 2016 (IEEE EPEC 2016) event, that includes tours.

### **List of proposed unique events**

Planning more DLs for PELS. Bidding on the IEEE PES General Meeting 2020.  
Will be applying for IEEE RS and PELS awards.

## ***SP, OE, & GRS – Joint Chapter of Signal Processing, Oceanic Engineering, and Geoscience and Remote Sensing***

Chair: Yifeng Zhou, [yifeng.zhou@crc.gc.ca](mailto:yifeng.zhou@crc.gc.ca)

| Activity Date, Time, Location               | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description  | Title/Speaker or Workshop Name                                                                                                                | Attendance IEEE/Total | Joint Activity Sponsors      |
|---------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------|
| November 17, 2015, 10:00-11:00, Shaw Centre | Canadian Tracking and Fusion Group (CTFG) Workshop 2015 Technical Talk | "The Coming Flood of Earth Observation Data: Challenges and Opportunities" by Dr. Maria Rey, Space Strategies Consulting Ltd                  | 8/33                  | C16 and CIS11/SMC28 chapters |
| November 17, 2015, 11:20-12:05, Shaw Centre | CTFG Workshop 2015 Technical Talk                                      | "Data Fusion in the hierarchy of sensors dedicated to the Surveillance of Canada's borders" by Major (R) Marc Fricker, Canadian Space Society | 8/33                  | C16 and CIS11/SMC28 chapters |
| November 17, 2015, 14:15-15:00, Shaw Centre | CTFG Workshop 2015 Technical Talk                                      | "Performance of the SAR-AIS Association System in Polar Epsilon" by Dr. Paris Vachon, DRDC                                                    | 8/33                  | C16 and CIS11/SMC28 chapters |
| November 17, 2015, 15:25-16:10, Shaw Centre | CTFG Workshop 2015 Technical Talk                                      | "The evolution of space based maritime surveillance in Canada - a commercial perspective" by                                                  | 8/33                  | C16 and CIS11/SMC28 chapters |

|  |  |                                 |  |  |
|--|--|---------------------------------|--|--|
|  |  | William Jefferies,<br>LOOKNorth |  |  |
|--|--|---------------------------------|--|--|

***TM, PCS, & SSIT – Joint Chapter of the Technical Management Council,  
Professional Communications Society, and Society on Social Implications  
of Technology***

Co Chair: Barbara Waruszynski, [b.waruszynski@sympatico.ca](mailto:b.waruszynski@sympatico.ca)

| Activity Date, Time, Location                        | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description                                                             | Title/Speaker or Workshop Name                                                                                | Attendance IEEE/Total        | Joint Activity Sponsors                                          |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------|
| April 20, 2015, 18:00-21:00, Algonquin College       | Technical Activity/ Workshop on professional and personal development for entrepreneurs (Professional Development Seminar Series) | The Versatile Engineer<br>(Tim Ragan)                                                                         | 15                           | TMC/PCS/SSIT/<br>AICN (co-sponsor)                               |
| May 30, 2015, 8:30-10:00, Carleton University        | Technical Activity: Presentation/ Plenary Talk                                                                                    | Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects<br>(Professor Barbara Oakley)  | 79                           | IEEE EMBS/<br>TMC/PCS/SSIT                                       |
| May 30, 2015, 13:00-14:30, Carleton University       | Technical Activity (EMBS DL Lecture)                                                                                              | Nanotextured Microfluidic Substrates Biomimicking Structured Hierarchy of Living Systems<br>(Dr. Samir Iqbal) | 39                           | IEEE EMBS/<br>TMC/PCS/SSIT                                       |
| March 23 and 29, April 13, June 8, and Sept 14, 2015 | Technical Activity: Webinars                                                                                                      | Interactive Webinars on Starting and Managing a Consulting Firm<br>(Kayne McGladrey)                          | 10 people per webinar        | AICN/<br>TMC/PCS/SSIT<br>(acted as co-sponsor but not in vtools) |
| May 17, June 10, September 29, 2015                  | Virtual Technical Activity Working Group Discussions                                                                              | Carleton University Disabilities Research Working Group                                                       | Approx. 5 people per meeting | TMC/PCS/SSIT                                                     |

## IEEE Ottawa Section Report to the AGM 2016

### Awards and/or Recognitions

- IEEE Communications Society Appreciation Certificate for role as Patron C-Chair for IFIP/IEEE International Symposium on Integrated Network Management (IM 2015)
- IEEE Senior Member status: bronze plaque received in 2014 (did not mention this in previous reports)

### IV. List of unique events held

- Series of technical interactive webinars on starting and managing a consulting firm (with AICN)
- Interactive workshop on The Versatile Engineer: Workshop for Entrepreneurs (very well received). This was part of the Professional Development Seminar Series.
- Carleton University Disabilities Research Working Group: Member of working group with the Disability Studies Committee at Carleton University in Ottawa in helping to establish a program and grants for the History of Disability and Technology in Canada: Virtual Exhibitions initiative.

### V. List of proposed unique events

- IEEE Ottawa Section Professional Development Seminar Series Workshops and Webinars (developing interpersonal skills both personally and professionally). Workshop to be held in November, 2016 on Creativity in Communications for Engineers.
- Continued discussions with Carleton University Disabilities Research Working Group.
- IEEE Ottawa Section Strategic Planning Retreat to be held in the near future. Date to be determined.
- Planning of proposed conference on SSIT in 2020 (TBD).

## VTS – Vehicular Technology Society

Chair: Hugh Reekie,

Email: [h.reekie@ieee.org](mailto:h.reekie@ieee.org)

Vice-Chair: Barry Pekilis,

Email: [barry.pekilis@ieee.org](mailto:barry.pekilis@ieee.org)

Website: <http://www3.bell.net/max-com/ottawa.vts.html>

| Activity Date, Time, Location                    | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name           | Attendance IEEE/Total | Joint Activity Sponsors |
|--------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------|-----------------------|-------------------------|
| 25 May 2016<br>2 – 4 pm<br>Carleton U,<br>Ottawa | Tech meeting – Electronics & sensors on Flexible substrates           | Dr. Ravinder Dahiya, Univ of Glasgow, UK | 12 30                 | AESS                    |
| 9 Sept 2016<br>2-4 pm<br>Ottawa U                | Antenna Suystems for 21st Century spacecraft                          | Dr. Sudhakar Rao                         | 10 20                 | AP/MTT, VTS etc         |

## Affinity Group Reports

### *AICN – Alliance of IEEE Consultant Network*

Chair: Bhagvat Joshi, [bjoshi@ieee.org](mailto:bjoshi@ieee.org)

Chair: Mike Bourassa, [majb2008@gmail.com](mailto:majb2008@gmail.com)

Website: <http://www.ieeeottawa.ca/aicn/about>

| Activity Date, Time, Location                                                         | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                           | Attendance IEEE/Total | Joint Activity Sponsors |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-------------------------|
| 13 Jan 2016<br>Algonquin College,<br>Ottawa                                           | Tech Meetings                                                         | "Unintentional Impacts of a LED Lighting" - Putting the Brakes on Hype - Robert Dick     | 10/13                 | IEEE Section Photonics  |
| Webinars<br>Mar 23/16<br>Mar 29/16<br>Apr 13/16<br>Jun 8/16<br>Sep 14/16<br>Oct 12/16 | Tech Meetings                                                         | "Interactive webinars on starting and managing a consulting firm – a total of 8 meetings | 10                    | TM14/PC26/SIT30         |
| 20 April 2016<br>Algonquin College,<br>Ottawa                                         | Tech Meeting/Prof Dev                                                 | The Versatile Engineer—Your Path to Mission Effectiveness. Kayne McGladrey               | 20/20                 | TM14/PC26/SIT30         |

#### List of unique events held

Interactive webinars on managing a consulting firm / starting their own business.

This is a set of 8 interactive modules presented weekly via a live webinar. The typical format is 1-hour presentation followed by time for Q&A. Kayne McGladrey, a practicing consultant and IEEE Member, presents these webinars. Kayne has also presented face-face to the IEEE Vancouver section. These seminars have proved to be very successful with about 8-10 attendees per event on average

#### List of proposed unique events

- Internet of Things – what's it all about
- Update on 5G cellular
- Spectrum management - possible speaker from the CRC
- Workshop on tax, liability and other issues relevant to those who wish to practice as consultants or similar roles. Workshop format jointly with other IEEE chapters
- Presentation on Financial Planning and Taxation for self-employed/consultants
- Finding Bad Guys with Big Data – Dr. D. Skillicorn of Queens. This talk addresses the challenges and opportunities of detecting criminals with the current

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abundance of data.

- Engineering Startups in HealthCare – M. Paquet, CEO Aetonix – M. Paquet speaks from first-hand experience of the various financial, physical, emotional, and market challenges facing startups in Healthcare.

## YP – Young Professionals

Chair: Alawi Assaggaf, [assaggaf@ieee.org](mailto:assaggaf@ieee.org)

Website: <https://www.facebook.com/IEEEYPOttawa>

| Activity Date, Time, Location                            | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name              | Attendance IEEE/Total | Joint Activity Sponsors |
|----------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------|-----------------------|-------------------------|
| July 25 <sup>th</sup><br>6:00-6:50pm<br>at D'Arcy McGees | Networking                                                            | Social Monday - IEEE EMC                    | 45                    | IEEE EMC YP             |
| July 25 <sup>th</sup><br>7:00-9:30pm                     | Social event                                                          | Haunted Walk - IEEE EMC                     | 30                    | IEEE EMC YP             |
| 12:00-1:30pm at Blue Cactus                              | Luncheon                                                              | Luncheon with Joanna Hill - IEEE EMC        | 25                    | IEEE EMC YP             |
| June 9th<br>6pm - 7pm                                    | Meeting                                                               | Revision of IEEE YP                         | 3                     |                         |
| Oct 1st,<br>6pm - 8pm                                    | Meeting                                                               | Preparing for the 'reclaim you group' event | 2                     |                         |

### List of unique events held

See first three entries for Section II

### List of proposed unique events

- Hands-on workshops in different areas (programming, designing, development, ... etc)
- Hackathons/Weekend projects in conjunction with R7 YP groups
- Social events and meetups.
- Joint event with upcoming conferences and other committees in the section

***LM – Life Member***

Chair: Wolfram Lunscher, [wlunscher@gmail.com](mailto:wlunscher@gmail.com)

| Activity Date, Time, Location | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                                                                                          | Attendance IEEE/Total | Joint Activity Sponsors |
|-------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|
| 5/30/2016<br>8:30             | Technical                                                             | Plenary Talk:<br>LEARNING HOW TO LEARN:<br>Powerful mental tools to help you master tough subjects                      | 125                   | LIFE MEMBER             |
| 5/30/2016<br>13:00            | Technical                                                             | IEEE EMBS DL<br>Lecture:<br>NANOTEXTURED MICROFLUIDIC SUBSTRATES<br>BIOMIMICKING STRUCTURED HIERARCHY OF LIVING SYSTEMS | 58                    | LIFE MEMBER             |

***WIE – Women in Engineering***

Chair: Winnie Ye, [Winnie\\_ye@carleton.ca](mailto:Winnie_ye@carleton.ca)

Vice Chair: Zahra Mohammad, [ZahraMohammad@cmail.carleton.ca](mailto:ZahraMohammad@cmail.carleton.ca)

Treasurer: Eugenia Lambiri

Webmaster: Laura Machado

Website: <http://www.ieeeottawa.ca/wie>

| Activity Date, Time, Location | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name | Attendance IEEE/Total | Joint Activity Sponsors |
|-------------------------------|-----------------------------------------------------------------------|--------------------------------|-----------------------|-------------------------|
|-------------------------------|-----------------------------------------------------------------------|--------------------------------|-----------------------|-------------------------|

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|                                             |                                                                                                                                                        |                                                                                   |                      |                                           |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------|
| May 31, 2016, 12:00 pm, Carleton University | Women in Engineering Panel, consisted of 4 women engineers and a moderator, answering questions prepared ahead of time and questions from the audience | Women in Engineering Panel, IEEE EMBS International Student Conference (ISC) 2016 | ~100                 | CU @ EMBS                                 |
| March 9, 2016 6:00pm-9:00p,                 | IEEE WIE Ottawa Wine and Cheese, network event                                                                                                         | IEEE WIE Ottawa Wine and Cheese                                                   | ~100                 | WIE uOttawa and Carleton Student Chapters |
| Fall 2016, exact date to be determined      | IEEE WiE Workshop Series – CAD/3D Modeling for beginners                                                                                               | CAD/3D Modeling for beginners, run by vice chair                                  | Unknown at this time | CU @EMBS IEEE WiE Carleton (tentative)    |

### List of proposed unique events

#### Winter 2016:

Workshop Series: Website Design – Blogging Edition

#### Spring 2016:

Women in Photonics Panel, for the International Conference Photonics North, 2017  
3D CAD for beginners workshop Oct 2016

### ***Ottawa- Special Interest Group on Humanitarian Technology (SIGHT)***

Chair: Alfredo Herrera, [alfredo.herrera@ieee.org](mailto:alfredo.herrera@ieee.org)

Vice Chair: Sean Campeau, [seancampeau@rogers.com](mailto:seancampeau@rogers.com)

Technical Activities: Kin Sze, [kinsze@ieee.org](mailto:kinsze@ieee.org)

No activities reported

## Student Branch Reports

### ***Algonquin College***

Chair: Abdul Majid Abdul Rahim, [abdu0289@algonquinlive.com](mailto:abdu0289@algonquinlive.com)

Vice Chair: Curtis Cunliffe, [cunl0004@algonquinlive.com](mailto:cunl0004@algonquinlive.com)

Secretary: Ben Haines [hain0044@algonquinlive.com](mailto:hain0044@algonquinlive.com)

## **IEEE Ottawa Section Report to the AGM 2016**

Faculty Advisor: Abdul Al-Azzawi, Ph.D., IEEE SM [alazzaa@algonquincollege.com](mailto:alazzaa@algonquincollege.com)

### **Electrical Power and Energy Conference (EPEC)**

**October 26-28, 2015**

**London, ON, Canada**

IEEE Algonquin College Student Branch Activities:

1. IEEE Algonquin College Student Branch Meeting, Wednesday, September 20, 2016, to elect the new IEEE Algonquin Student Branch.
2. IEEE Algonquin College Student Branch Meeting, Wednesday, September 14, 2016, to recruit new members.
3. IEEE Algonquin College Student Branch Meeting, Wednesday, September 7, 2016, to tidy up the IEEE Room T111a.
4. IEEE Algonquin College Student Branch Meeting, September 6-7, 2016, Orientation week.
5. IEEE Algonquin College Student Branch Open House to recruit new members, September 6 to 7, 2016, in ACCE building (CA), from 10:00 a.m. to 3:00 p.m. and 5:00 pm. to 8:00 p.m., Algonquin College.
6. IEEE Algonquin College Student Branch applied for \$500 from Algonquin Students for year 2016.
7. IEEE Algonquin College Student Branch Meeting, Thursday, March 3, 2016.
8. IEEE Algonquin College Student Branch for Battle Royal Meeting at 7:00 p.m., March 22, 2016, Room T-129.
9. IEEE Students Oral Paper Presentation, March 30, 2016, Kingston, ON, Canada.
10. IEEE Algonquin College Student Branch Meeting, Wednesday, April 20, 2016.
11. Attended all IEEE Ottawa Section Executives Meeting, Thursday, July 7, 2016.
12. Attended all IEEE Ottawa Section Executives Meetings in year 2016.
13. IEEE Algonquin College Student Branch will attend IEEE Ottawa Section GM, 2016.
14. IEEE EMBS ISC 2016, Expanding the Boundaries of Biomedical Engineering and Healthcare, May 29<sup>th</sup> to 31<sup>st</sup>, 2016, Ottawa, ON, Canada.
15. IEEE Ottawa Section Workshop, Agility for an App-centric Network-Integrated Management of Software Define Infrastructure, By Rodney G. Wilson, Senior Director External Research, Ciena, Ottawa, ON, Canada, Thursday, November 12 , 2015, in Algonquin College, Ottawa, Room T-129.

### **Carleton University**

Chair: Sean Tohidi, [chair@ieee.carleton.ca](mailto:chair@ieee.carleton.ca)

Vice-Chair: Ismail Syed, [vicechair@ieee.carleton.ca](mailto:vicechair@ieee.carleton.ca)

Secretary: Kevin Garrett, [secretary@ieee.carleton.ca](mailto:secretary@ieee.carleton.ca)

Treasurer: Alex Dube, [treasurer@ieee.carleton.ca](mailto:treasurer@ieee.carleton.ca)

Website: <http://www.ieeecarleton.ca>

| Activity Date, Time, | Activity Type (Tech Meeting, Workshop, DL, | Title/Speaker or Workshop Name | Attendance IEEE/Total | Joint Activity Sponsors |
|----------------------|--------------------------------------------|--------------------------------|-----------------------|-------------------------|
|----------------------|--------------------------------------------|--------------------------------|-----------------------|-------------------------|

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| Location                                                                                                                    | etc) and Brief Description                                                                                                                                                                       |                                                                                                                                                                                                                                                                 |                             |                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| October 6th 2015, 12PM - 5PM, Carleton University, MC Foyer                                                                 | IEEE Carleton Outreach                                                                                                                                                                           | IEEE Day 2015                                                                                                                                                                                                                                                   | 50 people visited the booth | None                                                                                                                                                |
| Bi-Weekly Tuesday (September 28 <sup>th</sup> 2015 – April 4 <sup>th</sup> 2016) 6PM, Carleton University, ME4233           | Technical Software Related Workshops (Linux, Git, LaTeX, Web Development)                                                                                                                        | <ul style="list-style-type: none"> <li>- Introduction to Linux</li> <li>- Introduction to Group Software Development using Git</li> <li>- Report and resume writing with LaTeX</li> <li>- Introduction to Web Development (extended workshop)</li> </ul>        | 10/20                       | None                                                                                                                                                |
| Bi-Weekly Thursday (October 8 <sup>th</sup> 2015 – April 2016) 6PM, Carleton University, AA510                              | Advanced Software Workshops (Django, machine learning, Android apps, electronic peripherals, Microsoft Azure)                                                                                    | <ul style="list-style-type: none"> <li>- Introduction to the Django Web Framework</li> <li>- Concepts of machine learning</li> <li>- Android app development</li> <li>- Introduction to peripherals</li> <li>- Machine Learning with Microsoft Azure</li> </ul> | 10/20                       | None                                                                                                                                                |
| October 10th and October 24th 2015, Carleton University, AA510                                                              | Technical Hardware Workshop                                                                                                                                                                      | Introduction to PCB design                                                                                                                                                                                                                                      | 10/20                       | None                                                                                                                                                |
| October 17 <sup>th</sup> 2015, Carleton University                                                                          | Engineering Competition                                                                                                                                                                          | Carleton University Engineering Competition (Programming Competition)                                                                                                                                                                                           | 6                           | Carleton Student Engineering Society                                                                                                                |
| Weekly – Thursday (October 1st 2015 – September 29th 2016, looking to continue all year) 6:30PM, Carleton University, AA510 | <ul style="list-style-type: none"> <li>- Technology Meeting</li> <li>- Workshops</li> <li>- Maker Space</li> <li>- Special Project Support</li> <li>- Special Project Starting Entity</li> </ul> | IEEE Carleton's Stay Late And Make (IEEE Carleton SLAM)                                                                                                                                                                                                         | 10/20                       | <ul style="list-style-type: none"> <li>- Room and Equipment bought by Systems and Computer Engineering Department at Carleton University</li> </ul> |

|                                                                                            |                                                                                                                                                                                |                                                                                         |                                                                                 |                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Friday,<br>October 23rd<br>2015,<br>5:30PM,<br>Carleton<br>University<br>MC2014            | Women In Engineering<br>social event to connect<br>upper year women with<br>lower year women                                                                                   | Women In Engineering: Ask<br>WIE                                                        | 5/15                                                                            | None                                                                                                                                                                                                                      |
| Saturdays<br>(November 7,<br>14, 21 2015)<br>12PM,<br>Carleton<br>University,<br>ME4233    | In-depth web<br>development workshop<br>series                                                                                                                                 | Web development<br>workshop: building your<br>own personal web page<br>from scratch     | 10/30                                                                           | None                                                                                                                                                                                                                      |
| November 20,<br>2015<br>Carleton<br>University,<br>MC 2014                                 | IEEE Carleton social<br>event                                                                                                                                                  | IEEE Carleton board game<br>night                                                       | 10/15                                                                           | None                                                                                                                                                                                                                      |
| Monday<br>December 8 <sup>th</sup><br>2015,<br>5:30PM,<br>Carleton<br>University<br>ME4195 | <ul style="list-style-type: none"> <li>- Technical Competition</li> <li>- Course Competition</li> <li>- Engineering Design Competition</li> <li>- Electrical Design</li> </ul> | IEEE Carleton Analog<br>Design Competition (IEEE<br>Carleton's ELEC3509<br>Competition) | 4/16                                                                            | <ul style="list-style-type: none"> <li>- ELEC3509 Course Instructor</li> <li>- Department of Electronics (Carleton University) for room and equipment support</li> <li>- Course Instructor and TAs for judging</li> </ul> |
| Monday<br>December<br>21st, 1pm,<br>Ten Sushi,<br>1490 Bank St                             | IEEE Carleton social<br>event                                                                                                                                                  | IEEE Carleton holiday lunch                                                             | 10/15                                                                           | None                                                                                                                                                                                                                      |
| January 17 <sup>th</sup><br>2016,<br>Tailgators,<br>1642 Merivale<br>Road                  | <ul style="list-style-type: none"> <li>- Volunteer Appreciation</li> </ul>                                                                                                     | IEEE Carleton Volunteer<br>Appreciation Event                                           | 8/15                                                                            | None                                                                                                                                                                                                                      |
| January 19th<br>2016, 6pm<br>Carleton<br>University,<br>ME 4359                            | SPAC Conference<br>networking workshop                                                                                                                                         | SPAC Networking<br>Workshop                                                             | 5/15                                                                            | Carleton Co-op and<br>Career Services                                                                                                                                                                                     |
| January 21st<br>2016, Hellenic<br>Centre, 6PM                                              | <ul style="list-style-type: none"> <li>- Professional Awareness</li> <li>- Networking Event</li> <li>- Conference</li> </ul>                                                   | Student Professional<br>Awareness Conference<br>(SPAC2016)                              | 225 total<br>Probably 50 or so<br>IEEE (Cannot find the<br>detailed statistics) | <ul style="list-style-type: none"> <li>- IEEE Ottawa Section</li> <li>- Skyworks</li> <li>- Ericsson</li> <li>- Blackberry</li> <li>- Kongsberg</li> </ul>                                                                |

|                                                                             |                                                                                                                                                    |                                             |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                             |                                                                                                                                                    |                                             |       | <ul style="list-style-type: none"> <li>- Gallium</li> <li>- NRC-ICT</li> <li>- IBM</li> <li>- Faculty of Engineering and Design (Carleton)</li> <li>- General Dynamics</li> <li>- Systems and Computer Engineering Department (Carleton)</li> <li>- Department of Electronics (Carleton)</li> <li>- Algonquin College</li> <li>- Carleton University Student Association</li> <li>- Graduate Student Association (Carleton)</li> <li>- Co-op and Career Services (Carleton)</li> <li>- IEEE UOttawa</li> <li>- IEEE AlgonquinC</li> </ul> |
| February 2 2016, 6pm, Carleton University, ME 4359                          | Volunteer Orientation                                                                                                                              | IEEE Carleton Volunteer Orientation         | 5/15  | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| March 9 <sup>th</sup> 2016, 6pm, Orange Art Gallery, 290 City Center Avenue | <ul style="list-style-type: none"> <li>- Conference</li> <li>- Women in Engineering Celebration</li> <li>- Networking</li> <li>- Social</li> </ul> | 7 <sup>th</sup> Annual WIE Wine and Cheese  | 70    | <ul style="list-style-type: none"> <li>- IEEE UOttawa</li> <li>- IEEE Ottawa Section</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| March 16 <sup>th</sup> , 2016, 6pm Carleton University, ME 4359             | Carleton research talk                                                                                                                             | Research at Carleton with Professor Chinnek | 5/20  | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| March 27 <sup>th</sup> 2016, 2pm, Merivale Bowling                          | <ul style="list-style-type: none"> <li>- Volunteer Appreciation</li> <li>- Social Gathering</li> </ul>                                             | SPAC and Office Volunteer Appreciation      | 20/30 | <ul style="list-style-type: none"> <li>- IEEE UOttawa</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                                                                                                 |                                                  |                                              |                 |                                        |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------|-----------------|----------------------------------------|
| Center, 1916 Merivale Road                                                                                                      |                                                  |                                              |                 |                                        |
| March 22nd, 2016, 6pm<br>Carleton University,<br>ME 4359                                                                        | Technical Workshop                               | IEEE and CSES LaTeX Workshop                 | 5/15            | - Carleton Student Engineering Society |
| March 28th, 2016, 6pm<br>Carleton University,<br>ME 4359                                                                        | Technical Competition                            | IEEE Carleton Papers Competition             | 5/15            | None                                   |
| April 2nd, 3rd, 2016,<br>Carleton University,<br>AA510                                                                          | Hackathon, technical competition                 | SLAM Hacks hackathon                         | 10/20           | None                                   |
| April 30th - May 1st, Mont Tremblant                                                                                            | - Executives get together<br>- Executive Retreat | IEEE Carleton University Executives' Retreat | 20/20           | None                                   |
| Bi-Weekly – Wednesday (October 7 <sup>th</sup> 2015 – April 7 <sup>th</sup> 2016)<br>6:00PM,<br>Carleton University,<br>ME 4359 |                                                  | Executive Meeting                            | - Usually 15/15 | None                                   |
| Bi-Weekly – Tuesday (October 5th 2015 – January 18 2016)<br>6:30PM,<br>Carleton University,<br>MC2014                           | - Meeting                                        | SPAC planning Meeting                        | - Usually 8/15  | None                                   |
| July 21st 2016,<br>Carleton University<br>MC2014                                                                                | - Meeting                                        | Executive Meeting                            | 15/15           | None                                   |
| Monday August 22nd 2016,<br>Carleton University<br>MC2014                                                                       | - Meeting                                        | Executive Meeting                            | 15/15           | None                                   |
| Biweekly -                                                                                                                      | - Meeting                                        | Executive Meeting                            | 15/15           | None                                   |

|                                                                                          |  |  |  |  |
|------------------------------------------------------------------------------------------|--|--|--|--|
| Wednesday,<br>(September<br>14 2016 -<br>April 2017)<br>Carleton<br>University<br>MC2014 |  |  |  |  |
|------------------------------------------------------------------------------------------|--|--|--|--|

### Best Practices

- Family like environment:
  - o Our student branch treats all members as a family. Our student branch encourages social activities between the members and the executive committee.
- Volunteers:
  - o Our student branch has a number of volunteers that volunteer their time to keep the McNaughton Resource Centre open as much as possible. These volunteers then become the first to know about the different events our branch is organizing.
  - o Our most active volunteers are considered as candidates for the following year's executive committee.
  - o In organizing our events, we try to have the volunteers take an active role. Our branch usually has volunteers help in organizing the events in addition to volunteering the day of. We encourage our volunteers to take on tasks for events such as SPAC, BR, Wine and Cheese, Workshops, SLAM etc.
- Committee:
  - o Our executive committee includes 18 executives as listed above. The work is divided between all the executives as much as possible. When organizing events, all executives help as much as they can. This large amount of executives means our branch has a lot to offer, since the executives will have different ideas for organizing and running events.
- Collaborations:
  - o Our Student Branch collaborates with multiple organizations, whether at Carleton University or outside to make sure the services we provide to our members and students are as good as possible.
  - o Our branch collaborates with the UOttawa and AlgonquinC student branches in organizing 3 annual events. These collaborations open the door to more learning and more networking with students in the other schools.
  - o Our branch also collaborates with inner Carleton groups such as the Carleton Student Engineering Society (CSES), Carleton University Student Association (CUSA), and Carleton University Robotics Club (CURC). This collaborations allows us to have workshops and competitions that do not interfere with the other organizations' work. For example, some of our workshop audience are also interested in what CURC does, therefore, we try to not have conflicting workshops or conflicting times to allow students to be able to go to both.

### Awards and/or Recognitions

- IEEE 2016 Exemplary Student Branch:
  - o Based on all the workshops, events, and activities we organized last year, our branch received the exemplary student branch award. We are looking to repeat this award for next year.
- IEEE 2016 Darrel Chong Award (Gold):
  - o Our Stay Late And Make (SLAM) initiative of maker space/project initiatives won

Silver in the Darrel Chong Award. Being in beta, our SLAM initiative had lots of success last year. This year, we are looking to win the highest awards for this initiative.

**List of unique events held**

- Student Professional Awareness Conference (SPAC2016)
- BattleRoyale 9 (BR10)
- Workshops: Each workshop will be done twice, once each semester (bi-weekly)
  - o Introduction to Linux
  - o Introduction to Group Software Development using Git
  - o Technical Writing with LaTeX
  - o IEEE Carleton's PCB Design Workshop
  - o Introduction to web development
  - o Web Development: Building a website from scratch
  - o Basic Soldering Through-hole
- 7<sup>th</sup> Annual WIE Wine and Cheese
- Competitions:
  - o Carleton University Engineering Competition (Programming Competition)
  - o IEEE Carleton Analog Design Competition (IEEE Carleton's ELEC3509 Competition)
  - o IEEE Carleton Biomedical Electronics Competition (IEEE Carleton's SYSC3203 competition)
  - o IEEE Xtreme 9.0
  - o Carleton's Papers Competition
- Stay Late And Make (weekly)
- SLAM Hacks Hackathon
- Volunteers Appreciation
- SPAC and BR Volunteers Appreciation

**List of proposed unique events**

- Student Professional Awareness Conference (SPAC2017)
  - o Late January, 2017
  - o Location: Hellenic Centre (Ottawa, Prince of Wales Drive)
  - o Professional networking, conference, career development focused event.
  - o Help from IEEE UOttawa and IEEE AlgonquinC is required for this event.
  - o Approximately \$10000 in expenses and \$10000 in revenues expected from this event.
- BattleRoyale 10 (BR10)
  - o November 2016
  - o Location: Algonquin College (Building T)
  - o Social, 24 hours gaming event for the gaming and technology enthusiasts.
  - o Work with IEEE UOttawa and IEEE AlgonquinC to organize the event.
  - o \$8000 in revenues and \$5000 in expenses are expected for the event.
- Workshops: Done in both semesters (bi-weekly)
  - Bi-Weekly (Wednesdays and Saturday if needed)
  - Location: Carleton University (ME4233)
  - Knowledge sharing and knowledge gaining
  - o Introduction to Linux
  - o Introduction to Group Software Development using Git
  - o Technical Writing with LaTeX
  - o Ruby on Rails development

## ***IEEE Ottawa Section Report to the AGM 2016***

- o Introduction to Web Development
  - o IEEE Carleton's PCB Design Workshop
  - o Speaker: Ham Radios
  - o Basics of Soldering
  - o Introduction to Mobile App Development
- 8<sup>th</sup> Annual WIE Wine and Cheese
  - o March 2017
  - o Location: Orange Art Gallery?
  - o Women In Engineering celebration and a social event
  - o IEEE CarletonU WIE and IEEE UOttawa WIE
- WIE Social Get Together
  - o Fall semester get together
  - o Winter semester get together
- Competitions:
  - o Carleton University Engineering Competition (Programming Competition)
    - Mid October 2016
    - Winners go to the Ontario Engineering Competition
    - Organized with Carleton Student Engineering Society
    - Location: Carleton University
  - o IEEE Carleton FPGA Competition (IEEE Carleton's ELEC3500 Competition)
    - First week of December
    - Location: Carleton University ME4195
    - FPGA design competition for the ELEC3500 course. Students must innovate a Tug-of-War game on an FPGA board
    - \$300 budgeted for this competition
  - o IEEE Carleton Analog Design Competition (IEEE Carleton's ELEC3509 Competition)
    - First week of December
    - Location: Carleton University ME4195
    - Analog design competition for the ELEC3509 course. Students must design an analog device (oscillator, amplifier, filter, etc).
    - \$200 budgeted for this competition
  - o IEEE Xtreme 10.0
    - October 22 2016
    - Location: Carleton University (TBD)
    - Organize a room for Carleton teams to use for the competition
  - o Carleton's Papers Competition
    - April 2017
    - Location: Carleton University (TBD)
    - Book a room for students to compete in, find judges and give prizes.
    - \$200 budgeted for this competition
- Stay Late And Make (weekly)
  - o Weekly, Thursday 6:30PM
  - o Location: Carleton University (AA510)
  - o Maker space, professional project get together. A space for students working on cool and awesome projects to meet other students and get to work together and help each other.
- Volunteers Appreciation
  - o January 2017
  - o Location: TBD
  - o Appreciation of the hard working volunteers that help IEEE Carleton University Student Branch in organizing and running our events
- SPAC and BR Volunteers Appreciation
  - o March 2017

## IEEE Ottawa Section Report to the AGM 2016

- o Location: TBD
- o Appreciation of the hard working volunteers that help IEEE CarletonU and the other Student Branches in Ottawa run SPAC and BR.
- SLAM Competitions
  - o Monthly, starting in October
  - o Location: Carleton University (AA510)
  - o Every month, SLAM will offer challenges to attendees to work on throughout the month. The best challenge submissions will win points and the people with the most points at the end of the semester will win prizes.

### University of Ottawa

Chair: Danielle Marchand, [chair@ieeeuottawa.ca](mailto:chair@ieeeuottawa.ca)

Vice Chair: Brendan Keyworth, [vice-chair@ieeeuottawa.ca](mailto:vice-chair@ieeeuottawa.ca)

Treasurer- William Pearson

Secretary- Emilie Cobbold

Website: <http://www.ieeeuottawa.ca>

| Activity Date, Time, Location                     | Activity Type (Tech Meeting, Workshop, DL, etc) and Brief Description | Title/Speaker or Workshop Name                           | Attendance IEEE/Total         | Joint Activity Sponsors                             |
|---------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------|-------------------------------|-----------------------------------------------------|
| October 6 <sup>th</sup> 2015                      | Open House                                                            | IEEE Day                                                 | 35 Students                   |                                                     |
| October 23 <sup>rd</sup> 2015                     | Competition                                                           | IEEEExtreme 9                                            | 5 Students                    |                                                     |
| November 2 <sup>nd</sup> and 5 <sup>th</sup> 2015 | Workshop                                                              | C Programming Tutorial                                   | 8 Students                    |                                                     |
| November 4 <sup>th</sup> 2015                     | WIE Event                                                             | Screening of Code Girl                                   | 20 students                   | uOttawa GSA                                         |
| November 7 <sup>th</sup> 2015                     | Workshop                                                              | Linux Workshop                                           | 25 students                   | uOttawa CSSA                                        |
| November 18 <sup>th</sup> 2015                    | Workshop                                                              | Microsoft Azure Resume Building Workshop                 | 40 students                   | Microsoft                                           |
| November 24 <sup>th</sup> 2015                    | Guest Speaker                                                         | Attosecond Lasers by Dr. Paul Corkum                     |                               | Photonics Affinity Group                            |
| December 4 <sup>th</sup> 2015                     | WIE Social Event                                                      | Zumba Night                                              | 25 Students                   | WIE Student Affinity Group                          |
| December 7 <sup>th</sup> -11 <sup>th</sup> 2015   | Study Sessions                                                        | Cookies N Cram                                           | Many students throughout week |                                                     |
| January 13 <sup>th</sup> 2016                     | Guest Speaker                                                         | "Unintentional Impacts of a LED Lighting" by Robert Dick |                               | uOttawa Photonics Chapter, Algonquin Student Branch |

## IEEE Ottawa Section Report to the AGM 2016

|                                 |                  |                                     |                                          |                                              |
|---------------------------------|------------------|-------------------------------------|------------------------------------------|----------------------------------------------|
| January 20 <sup>th</sup> 2016   | Workshop         | Ardunio Workshop                    | 15 Students                              |                                              |
| January 21 <sup>st</sup> 2016   | Conference       | SPAC                                | 160 Students+Attendees                   | IEEE Carleton Student Branch                 |
| February 29 <sup>th</sup> 2016  | Workshop         | C Programming Tutorial              | 5 students                               |                                              |
| March 14 <sup>th</sup> 2016     | Workshop         | Raspberry Pi Workshop               | 20 Students                              |                                              |
| March 16 <sup>th</sup> 2016     | Networking Event | WIE Wine and Cheese                 | 80 Students + 20+ Industry Professionals | Carleton Student Branch                      |
| March 30 <sup>th</sup> 2016     | Tour             | Ciena Field Trip                    | 8 Students                               | Ciena Cooperation Ottawa                     |
| May 14 <sup>th</sup> 2016       | LAN Competition  | Battle Royale 9                     | 99 Students                              | IEEE Carleton and Algonquin Student Branches |
| September 7 <sup>th</sup> 2016  | Open House       | Sub Association/Clubs Day           | 100 Students                             | Engineering Students Society                 |
| September 12 <sup>th</sup> 2016 | Networking Event | Meet and Greet                      | 20 Students                              |                                              |
| September 13 <sup>th</sup> 2016 | Social Event     | IEEE Scavenger Hunt                 | 20 Students                              |                                              |
| September 15 <sup>th</sup> 2016 | Workshop         | Temperature Sensor Control Workshop | 5 Students                               | Ottabotics                                   |
| October 6 <sup>th</sup> 2016    | Tour             | uOttawa Server Room Tour            | Estimated 10 Students                    |                                              |

### Best Practices

- WIE Wine and Cheese
- Cookies N Cram Studying Sessions
- IEEE Battle Royale
- BigEngLittleEng Mentoring Program (launched Fall 2015)

### List of unique events held

- WIE Zumba Night
- Microsoft Azure Workshop
- Ciena Field Trip

### List of proposed unique events

- Hydro Quebec Tour, date TBD, \$1000 budget (busing)
- More technical workshops, \$400 budget
- Collaborative Event with other Engineering Student Sub Associations

## **IEEE Ottawa Section Executive 2016**

The current IEEE Ottawa Section executive officers are as follows:

- Chair: Mrs. Janet Davis, SMIEEE – [janet.davis@ieee.org](mailto:janet.davis@ieee.org)
- Vice Chair: Ms. Anissa Shaddy - [anissa@ieee.org](mailto:anissa@ieee.org)
- Treasurer: Dr. Mike Bourassa, SMIEEE - [michael.bourassa@ieee.org](mailto:michael.bourassa@ieee.org)
- Secretary: Mr. Abdulhak Nagy - [a.n.ca@ieee.org](mailto:a.n.ca@ieee.org)
- Past Chair: Dr. Rami Abielmona, SMIEEE, P.Eng. - [rabiemo@ieee.org](mailto:rabiemo@ieee.org)

A complete list of the Ottawa Section officers follows at the end of this report.

## **IEEE Ottawa Section Elections for 2017**

The Section officers proposed by the Nomination and Appointments Committee for the Ottawa Section Executive in 2017:

- Chair: Ms. Anissa Shaddy - [anissa@ieee.org](mailto:anissa@ieee.org)
- Vice Chair: Mr. Alfredo Herrera - [alfredo.herrera@ieee.org](mailto:alfredo.herrera@ieee.org)
- Treasurer: Mr. Mohamed Abdelazez - [m.h.abdelaz@gmail.com](mailto:m.h.abdelaz@gmail.com)
- Secretary: Ms. Zahra Mohammad - [zahramohammad@cmail.carleton.ca](mailto:zahramohammad@cmail.carleton.ca)
- Past Chair: Mrs. Janet Davis, SMIEEE – [janet.davis@ieee.org](mailto:janet.davis@ieee.org)

Other nominations supported by a petition of at least 10 IEEE Ottawa full members are welcome too, and should be sent to the Nominations and Appointments Committee Chair Dr. Rami Abielmona [rabiemo@ieee.org](mailto:rabiemo@ieee.org) no later than Oct. 12, 2016.

Voting will take place after presentation of the candidates at the Annual General Meeting. The results will be announced at the Annual General Meeting.

## List of 2016 Section Executives and Officers

| Name                                            | Position          | Email                                                                          | Initials |
|-------------------------------------------------|-------------------|--------------------------------------------------------------------------------|----------|
| <b>EXECUTIVES</b>                               |                   |                                                                                |          |
| Janet Davis                                     | Chair             | <a href="mailto:janet.davis@ieee.org">janet.davis@ieee.org</a>                 |          |
| Anissa Shaddy                                   | Vice Chair        | <a href="mailto:anissa@ieee.org">anissa@ieee.org</a>                           |          |
| Abdulhak Nagy                                   | Secretary         | <a href="mailto:a.n.ca@ieee.org">a.n.ca@ieee.org</a>                           |          |
| Mike Bourassa                                   | Treasurer         | <a href="mailto:michael.bourassa@ieee.org">michael.bourassa@ieee.org</a>       |          |
| Rami Abielmona                                  | Past Chair        | <a href="mailto:rabiemo@ieee.org">rabiemo@ieee.org</a>                         |          |
| <b>COMMITTEES</b>                               |                   |                                                                                |          |
| <b>Annual General Meeting (AGM) Planning</b>    |                   |                                                                                |          |
| Anissa Shaddy                                   | Chair             | <a href="mailto:anissa@ieee.org">anissa@ieee.org</a>                           |          |
| <b>Awards &amp; Recognitions</b>                |                   |                                                                                |          |
| Wahab Almuhtadi                                 | Chair             | <a href="mailto:almuhtadi@ieee.org">almuhtadi@ieee.org</a>                     |          |
| [Ottawa Section Execs]                          | Members           | Chair, Vice Chair, Secretary,<br>Treasurer, Past Chair                         |          |
| Raed Abdullah                                   | Member            | <a href="mailto:raedabdullah@ieee.org">raedabdullah@ieee.org</a>               |          |
| <b>Bylaws</b>                                   |                   |                                                                                |          |
| Branislav Djokic                                | Chair             | <a href="mailto:branislav@ieee.org">branislav@ieee.org</a>                     |          |
| Kexing Liu                                      |                   | <a href="mailto:kexing.liu@ieee.org">kexing.liu@ieee.org</a>                   |          |
| <b>Communications / Publications</b>            |                   |                                                                                |          |
| Maytham Sabbagh                                 | Chair             | <a href="mailto:maytham.sabbagh.ca@ieee.org">maytham.sabbagh.ca@ieee.org</a>   |          |
|                                                 | Newsletter Editor |                                                                                |          |
| Ismail Syed                                     | Webmaster         | <a href="mailto:ismail.syed@ieee.carleton.ca">ismail.syed@ieee.carleton.ca</a> |          |
| <b>Educational Activities (EA)</b>              |                   |                                                                                |          |
| Branislav Djokic                                | Chair             | <a href="mailto:branislav@ieee.org">branislav@ieee.org</a>                     |          |
|                                                 |                   |                                                                                |          |
| <b>Engineers in Transition Activities (EiT)</b> |                   |                                                                                |          |
|                                                 | Chair             |                                                                                |          |

|                                          |            |                                                                                |  |
|------------------------------------------|------------|--------------------------------------------------------------------------------|--|
| <b>Membership Development (MD)</b>       |            |                                                                                |  |
| Anissa Shaddy                            | Chair      | <a href="mailto:anissa@ieee.org">anissa@ieee.org</a>                           |  |
| Maryam Kaka                              | Vice Chair | <a href="mailto:maryam.kaka@ieee.carleton.ca">maryam.kaka@ieee.carleton.ca</a> |  |
| <b>Nominations and Appointments</b>      |            |                                                                                |  |
| Rami Abielmona                           | Chair      | <a href="mailto:rabiemo@ieee.org">rabiemo@ieee.org</a>                         |  |
| Sreeraman Rajan                          |            | <a href="mailto:sreeraman@ieee.org">sreeraman@ieee.org</a>                     |  |
| Raed Abdullah                            |            | <a href="mailto:raedabdullah@ieee.org">raedabdullah@ieee.org</a>               |  |
| Wahab Almuhtadi                          |            | <a href="mailto:almuhtadi@ieee.org">almuhtadi@ieee.org</a>                     |  |
| Branislav Djokic                         |            | <a href="mailto:branislav@ieee.org">branislav@ieee.org</a>                     |  |
| John Grefford                            |            | <a href="mailto:grefford@ieee.org">grefford@ieee.org</a>                       |  |
| Tom Lavrisa                              |            | <a href="mailto:lavrisa@ieee.org">lavrisa@ieee.org</a>                         |  |
| <b>Ottawa Robotics Competition</b>       |            |                                                                                |  |
|                                          |            |                                                                                |  |
| Heidi Li                                 | Chair      | <a href="mailto:heidi.li.ca@ieee.org">heidi.li.ca@ieee.org</a>                 |  |
|                                          | Treasurer  |                                                                                |  |
|                                          |            |                                                                                |  |
| <b>Strategic Planning</b>                |            |                                                                                |  |
| Barbara Waruszynski                      | Chair      | <a href="mailto:b.waruszynski@sympatico.ca">b.waruszynski@sympatico.ca</a>     |  |
| Raed Abdullah                            |            | <a href="mailto:raedabdullah@ieee.org">raedabdullah@ieee.org</a>               |  |
| Janet Davis                              |            | <a href="mailto:janet.davis@ieee.org">janet.davis@ieee.org</a>                 |  |
| Sreeraman Rajan                          |            | <a href="mailto:sreeraman@ieee.org">sreeraman@ieee.org</a>                     |  |
| Wahab Almuhtadi                          |            | <a href="mailto:almuhtadi@ieee.org">almuhtadi@ieee.org</a>                     |  |
| Branislav Djokic                         |            | <a href="mailto:branislav@ieee.org">branislav@ieee.org</a>                     |  |
| <b>Teacher in Service Program (TISP)</b> |            |                                                                                |  |
| Wolfram Lunscher                         | Chair      | <a href="mailto:wlunscher@gmail.com">wlunscher@gmail.com</a>                   |  |
| Janet Davis                              |            | <a href="mailto:janet.davis@ieee.org">janet.davis@ieee.org</a>                 |  |
| <b>Senior Membership</b>                 |            |                                                                                |  |
| Sreeraman Rajan                          | Chair      | <a href="mailto:sreeraman@ieee.org">sreeraman@ieee.org</a>                     |  |
|                                          |            |                                                                                |  |
| <b>Conference</b>                        |            |                                                                                |  |
| Wolfram Lunscher                         | Chair      | <a href="mailto:wlunscher@gmail.com">wlunscher@gmail.com</a>                   |  |
| Wahab Almuhtadi                          |            | <a href="mailto:almuhtadi@ieee.org">almuhtadi@ieee.org</a>                     |  |
| Sreeraman Rajan                          |            | <a href="mailto:sreeraman@ieee.org">sreeraman@ieee.org</a>                     |  |

|                                                                                                         |                 |                                                                                |  |
|---------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------|--|
| Raed Abdullah                                                                                           |                 | <a href="mailto:raedabdullah@ieee.org">raedabdullah@ieee.org</a>               |  |
| <b>TECHNICAL CHAPTERS</b>                                                                               |                 |                                                                                |  |
| <b>AESS – Aerospace and Electronic Systems Society</b>                                                  |                 |                                                                                |  |
| Hugh Reekie                                                                                             | Chair           | <a href="mailto:h.reekie@ieee.org">h.reekie@ieee.org</a>                       |  |
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| <b>AP/MTT – Microwaves/Antennas/Propagation Society</b>                                                 |                 |                                                                                |  |
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| <b>CI/SMC – Computational Intelligence Society / Systems, Man and Cybernetics Society Joint Chapter</b> |                 |                                                                                |  |
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| <b>CPMT - Components, Packaging and Manufacturing Technology Society</b>                                |                 |                                                                                |  |
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| <b>DEIS - Dielectrics and Electrical Insulation Society – Joint Ottawa-Montreal Chapter</b>             |                 |                                                                                |  |
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| <b>EMBS – Engineering in Medicine and Biology Society</b>                                     |                     |                                                                              |  |
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