



TITLE: Cybersecurity Evaluation and Assurance for IoT-Enabled Systems

## **ABSTRACT:**

The advent of the Internet of Things (IoT) has enabled the development of systems capable of collecting and processing vast amounts of data to enhance system operation and/or to predict or tailor user experiences. The development, adoption, and evolution of systems with more complex software and increased connectivity enabled by IoT technologies has led to a new frontier of cybersecurity vulnerabilities from which such systems were previously shielded. As a result, there is an ever-growing need to evaluate and assure the cybersecurity of IoT-enabled systems, and the information that they use, store, and communicate, in the face of cyber-attacks and failures.

In this talk, I will explore the growing range of complex challenges faced when evaluating and assuring the cybersecurity of IoT-enabled systems. I will also discuss the opportunities that this presents in developing new and innovative ways to engineer more secure and trustworthy IoT-enabled systems. In particular, I will present recent advances in addressing system-level cybersecurity evaluation and assurance using an example IoT-enabled system.

## **Admission is FREE!**

**Location: 4359 Mackenzie Building, Carleton University.** 

Map: https://carleton.ca/campus/map/

Time: 6:00 PM
Dates: April 8<sup>th</sup>



## **BIOGRAPHY:**

Dr. Jason Jaskolka is an Assistant Professor in the Department of Systems and Computer Engineering at Carleton University, Ottawa, ON, Canada. He received his Ph.D. in Software Engineering in 2015 from McMaster University, Hamilton, ON, Canada. His research interests include cybersecurity evaluation and assurance, security-by-design, and formal methods and algebraic approaches for software and security engineering. He is interested in applying his research to critical infrastructures, cyber-physical and distributed systems, and the Internet of Things (IoT).