

SEMLA 2019

The 2nd International Symposium on Software Engineering for Machine Learning Applications

May 23th – 24th 2019, Montréal, QC, Canada



Lionel C. Briand is a professor in software verification and validation at the SnT center for Security, Reliability, and Trust, University of Luxembourg, where he is also the vice-director of the center. He is currently running multiple collaborative research projects with companies in the automotive,

satellite, financial, and legal domains. Lionel was elevated to the grade of IEEE Fellow in 2010 for his work on the software testing. He was granted the IEEE Computer Society Harlan Mills award and the IEEE Reliability Society engineer-of-the-year award for his work on model-based verification and testing, respectively in 2012 and 2013. He received an ERC Advanced grant in 2016 — on the topic of modeling and testing cyber-physical systems — which is the most prestigious individual research grant in the European Union.

Keynote Title: Functional Safety in ML-Based Systems

Abstract: Many safety-critical systems, such as autonomous driving systems, rely on machine learning software components. Such systems need to be certified according to appropriate standards and their functional safety needs to be ensured at an acceptable level of confidence. We get, however, very limited help from techniques that have shown to be effective for standard software. This talk will attempt to assess the state of the art regarding the verification and testing of ML software components, assess the consequences in the context of functional safety, and outline research directions.

What is SEMLA?

SEMLA aims at bringing together leading researchers and practitioners in software engineering and machine learning to reflect on and discuss the challenges and implications of engineering complex data-intensive software systems.

Full Program: <https://semla.polymtl.ca/program/>

Registration: <https://semla.polymtl.ca/registrationpage/>