C-RISE Tutorial Series

Stochastic Petri nets and its Applications

The Centre for Risk, Integrity and Safety Engineering (C-RISE) offers tutorials on topics related to safety, risk and reliability engineering.

**Topic: Stochastic Petri nets and its Applications**

Petri nets were developed in 1962 as a new graphical and mathematical model to connect events and conditions. They were first applied in computer science and automatic control. Recently, Petri nets were adopted for safety, risk and reliability analysis. For this tutorial, we will use an extended Petri net, called stochastic Petri nets with predicates coupled with Monte Carlo simulation. This formalism uses mathematical variables, essentially Booleans, and logic operators to build and monitor the model outputs.

**Facilitator:**

Dr Mohammed Taleb-Berrouane joined C-RISE in 2015 as a visiting PhD student from the Algerian Institute of Maintenance and Safety Engineering. After two years of research in C-RISE, he received his PhD in Process Safety Engineering with distinction. He is currently a team member in a multi-institutional research project on Managing Microbial Corrosion in Canada’s Offshore & Onshore Oil Production Operations.

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**When:** Monday, May 14, 2018, 5:00 PM - 7:00 PM  
**Where:** EN4000 - Engineering Faculty Lounge  
**Refreshments will be served.**  
**RSVP requested by:** Friday, May 11, 2018 to nling@mun.ca

All are welcomed to attend