Open Invited Track on "Cybersecurity of control and safety systems" for IFAC MIM 2019

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Scope

Modern digital control systems (I&C) are now at the core of many industrial facilities, conditioning their performance and safety. They rely on complex and distributed architectures, implementing multiple functions, on numerous digital components throughout the facility. A more profound automation of industrial facilities has the potential to increase operation safety, to enhance production and to reduce development costs. Nevertheless, it also brings new cyber security threats for the facility. Logically, the technical evolutions of control and safety systems (including interconnectivity, use of COTS and of wide audience standards), and the rapid evolution of the threat landscape has turned cybersecurity into a high-priority issue. To face this challenge, innovation and research are needed: this session aims at contributing to this effort. It is open to both industrial and academic contributions in the area of cybersecurity of control and safety systems. High-quality scientific papers are expected, but industrial use-cases and application reports are also most welcome.

Topics

The list of topics includes, but is not limited to:

- Secure development of control systems or safety systems
- Security metrics
- Intrusion-tolerant and resilient systems and architectures
- Coordination between safety and cybersecurity requirements or provisions
- Intrusion detection in control systems
- Threat and attack modeling
- Formal security models
- Assessment tools and methodologies
- Cybersecurity solutions matching SCADA specificities and constraints
- Cybersecurity maintenance over time in I&C environments
- Risk assessment approaches adapted to I&C context
- Cybersecurity exercises and contingency plans
- Incidence response
- Forensics for industrial control systems
- Policy, regulations, normative frameworks
- National and international coordination or research initiatives

Important dates and submission information

Important dates:

- Open Invited Track paper submission – December 15, 2018
- Notification on acceptance – February 20, 2019
- Final camera-ready paper submission – March 15, 2019

For author guidelines, please refer to www.ifac-control.org . All papers must be submitted electronically at https://ifac.papercept.net/ . All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it on line.

Submission details are available on the symposium website. All submissions must be written in English.

The corresponding author submits the paper online (pdf format) as Open Invited Track Paper. Submission as an invited paper requires the use of Open Invited Track code: **x8ytu**.

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