

Announcement

DISC Summer School

A Systems and Control Perspective on Privacy, Safety, and Security in Large-Scale Cyber-Physical Systems

NH Atlantic, The Hague, The Netherlands
July 3-6, 2017

Invitation

Bayu Jayawardhana, Ming Cao and Tamas Keviczky have the pleasure to invite you to participate in the DISC Summer School on "A Systems and Control Perspective on Privacy, Safety, and Security in Large-Scale Cyber-Physical Systems", which is scheduled to take place from July 3-6, 2017, at NH Atlantic, the Hague (Kijkduin), The Netherlands.

The invitation is aimed at research students, staff members, researchers and engineers engaged in the systems and control area. Distinguished speakers will each present a series of tutorial lectures.

Privacy, Safety, and Security in Large-Scale Cyber-Physical Systems

The increasing adoption of cyber-physical systems (CPS) and internet-of-things (IoT) introduces new control problems beyond the traditional tasks of stabilization and optimization. Some of the control challenges are related to the operation of future, highly interconnected CPS in a safety- or mission-critical environment, and to the protection of security and privacy where sensor and actuator data, and other control parameters are communicated in a networked CPS. Recent denial-of-service attacks to critical infrastructure and several accidents involving autonomous cars are some of the instances where new theoretical developments in the systems and control field are needed.

In this summer school program, we will present recent developments towards this endeavor and particular attention will be given to:

- **differential privacy concept in a control and networked systems context**
- **analysis and design of resilient and secure control systems**
- **safety control of CPS**

The lectures contain both recent control theoretical development, as well as, applications.

Lecturers

The main program will consist of a number of international and national speakers. Keynote lectures will be given by:

- **Fabio Pasqualetti**, University of California, USA
- **Jerome Le Ny**, Polytechnique Montreal, Canada
- **Rafael Wisniewski**, Aalborg University, Denmark
- **Yiannis Papadopoulos**, University of Hull, United Kingdom
- **Henrik Sandberg**, KTH Royal Institute of Technology, Sweden

and complemented by talks given by various DISC lecturers:

- **Manuel Mazo**, Delft University of Technology, NL
- **Peyman Mohajerin Esfahani**, Delft University of Technology, NL
- **Claudio de Persis**, University of Groningen, NL

Registration

The registration fee, which includes full board and lodging, is

- 800,- euro for DISC students/members (until May 1, 2017-early bird) and 950,- euro (after May 1, 2017)
- 1000,- euro for non-DISC members (until May 1, 2017-early bird) and 1150,- euro (after May 1, 2017)

For more information about the accommodation arrangements please refer to the website <http://disc.tudelft.nl/education/summer-school/summer-school-2017/>

The school is limited to 45 participants based on a first-come first-serve policy. The registration deadline is June 19, 2017 (Early bird deadline May 1, 2017).

You can register at the following website: <http://disc-courseplatform.nl>. Non DISC members can also send an email to: secr@disc.tudelft.nl (Please mention your full name and university including address).

For further information, contact the DISC administrative office: Martha Otte (m.w.otte@tudelft.nl) or the organizers: Bayu Jayawardhana (b.jayawardhana@rug.nl); Ming Cao (m.cao@rug.nl) and Tamas Keviczky (t.keviczky@tudelft.nl)