



ACCESS Linnaeus Centre

EU-US08 Workshop

16 June, 2008



Networked Information and Control Systems



ACCESS Linnaeus Centre



Center for Information Technology Research in the Interest of Society



Welcome to the first EU-US Workshop on Networked Information and Control Systems. The aim of the workshop is to gather key researchers from academia and industry to discuss research challenges and emerging industrial trends on next generation networked embedded systems.

The workshop is organized into three themes:

- **Mobility and autonomy in cyber-physical systems**
- **Wireless sensing and control for embedded networks**
- **Robustness and security of large-scale infrastructures**

The discussions will cut across several industrial domains including automotive, aerospace, energy, health-care, home automation, industrial control, telecommunication, and transportation.

The workshop includes presentations to share information on current and future R&D efforts, as well as open discussion sessions for future research areas in which new collaboration could provide benefits.

Concrete cooperation mechanisms that pave the way for future joint initiatives will be sought. The workshop continues a series of successful events contributing toward increased collaboration between the European Union and the United States of America on protection of critical infrastructures and on large-scale control and real-time systems.



Program

- 8:30 *Arrival and Breakfast*
- 9:00 Welcome; **Karl H Johansson, ACCESS, KTH**
- 9:15 Keynote: **Alkis Konstantellos, EC-ICT**, "EC Networked systems R&D activities and future initiatives"
- 9:45 Keynote: **Ruzena Bajcsy, CITRIS, UC Berkeley**, "AI-embedded humans"
Chair: Bo Wahlberg, ACCESS, KTH
- 10:30 *Coffee break*
- 11:00 Keynote: **Björn Gudmundsson, Ericsson**, "Vision and trends in communications"
Chair: Mikael Skoglund, ACCESS, KTH
- 11:45 **Mobility and Autonomy in Cyber-Physical Systems**
Open problems session (10 min slots):
Per Bodin, Swedish Space Corporation
Dan Work, UC Berkeley
Karl-Erik Årzen, Lund University
Alberto Bemporad, University of Siena
Luis Almeida, Universidade de Aveiro
- 12:30 *Lunch*
- 13:30 Keynote: **Steven Glaser, CITRIS, UC Berkeley**, "Intelligent infrastructures"
Chair: Håkan Hjalmarsson, ACCESS, KTH
- 14:15 **Wireless Sensing and Control for Embedded Networks**
Open problems session (10 min slots):
Andreas Willing, TU Berlin
Carlos Canudas de Wit, Grenoble
Marco Taisch, Politecnico di Milano
DK Arvind, University of Edinburgh
Jerker Delsing, Luleå Technical University
Stamatis Karnouskos, SAP
- 15:00 *Coffee break*
- 15:30 **Robustness and Security of Large-scale Infrastructures**
Open problems session (10 min slots):
Chair: Karl-Erik Årzen, Lund University
John Baras, University of Maryland
Rita Lenander, E.ON
Jan van Schuppen, CWI
Annarita Gianni, TRUST, UC Berkeley
Pontus Johnson, ICS, KTH
- 16:30 **Wrap up - What's Next?**
- 17:30 Closing
- 19:00 *Dinner cruise*

Organization

Center Board

Prof. Peter Gudmundson, *KTH Rector, Chairman*
Prof. Bastiaan Kleijn, *ACCESS, Vice-chairman*
Mikael Höök, *Ericsson Research*
Dr. Staffan Truvé, *SICS*
Prof. Bo Wahlberg, *ACCESS*
Prof. Gunnar Karlsson, *ACCESS*

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Prof. Björn Ottersten, *Director*
Prof. Karl Henrik Johansson, *Co-Director*
Prof. Mikael Skoglund, *Director of Grad School*
Prof. Erik Aurell
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Contact Information

ACCESS Office

Marie Androv, *Public Relations Officer*
access@ee.kth.se
08-790 8413

Osquldas väg 10, 4th floor
SE-100 44 Stockholm
Sweden

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www.access.ee.kth.se/EU-US08