

טופס הרשמה

לכבוד
האיגוד הישראלי לבקרה אוטומטית
הפקולטה להנדסת חשמל
קרית הטכניון, חיפה
טל: 04-8294780 ; פקס: 04-8295757 ; 04-8295745

א.ג.ג.,

הנני מבקש/ת לרשום אותי ליום עיון בנושא:

Networked Control Systems: Modeling, Design, and Applications

אשר יערך במלון "דניאל" הרצליה, ביום ב' 31.10.2011

כתובת: _____

טלפון: _____

מקום עבודה: _____

טלפון: _____ פקס: _____

מצורפת המחאה ע"ס _____ ש"ח

תאריך _____ חתימה _____

דמי השתתפות:

רשום מוקדם עד	23.10.2011	400 ₪
רשום החל מ-	24.10.2011	450 ₪
סטודנט (בזמן מלא)		100 ₪

דמי ההשתתפות כוללים ארוחת צהרים, כיבוד וחומר מודפס.
ההרשמה גם במקום, אם יוותרו מקומות.

קו 29, מתחנת הרכבת בהרצליה למלון, יוצא כל 10 דקות,
(זמן נסיעה כ- 15 דקות)

התכנית

8:45 – 09:15	Registration
09:15 – 09:30	Opening Remarks N. Shimkin/ L. Mirkin, Technion
09:30 – 10:45	Session 1: Basic concepts in networked control: From biological swarms to graph-based models
10:45 - 11:15	Coffee break
11:15 – 12:30	Session 2: The consensus problem: Reaching decentralized agreements through cooperative control
12:30 - 14:00	Lunch Break
14:00 – 15:15	Session 3: Application 1 - Multi-agent robotics: Formation control and Leader-follower networks
15:15 – 15:45	Coffee break
15:45 – 17:00	Session 4: Application 2 - Sensor networks: Coverage and detection problems

Notes:

- The workshop language is English
- All technical sessions will be presented by Professor Magnus Egerstedt

Networked Control Systems: Modeling, Design, and Applications

Networked control systems constitute a fascinating and quickly evolving area of control and decision theory, widely regarded as one of the key future directions with far-reaching applications. A networked control system consists of a set of dynamical units that interact over a signal exchange network for its coordinated operation and behavior. Such systems have found many applications in diverse areas of science and engineering, including multiple space, air, land, and underwater vehicles, energy and power systems, physiology, and medicine.

Currently, significant research efforts are underway in the controls, systems, and communications communities to lay down a foundation for the analysis and control of networked systems. The workshop will provide an overview of the tools and techniques that have proven instrumental for studying networked control systems as well as outline current research directions.

Magnus B. Egerstedt is a professor in the School of Electrical and Computer Engineering at the Georgia Institute of Technology. He holds an adjunct appointment in the Division of Interactive and Intelligent Computing with the College of Computing at Georgia Tech and a visiting position with the School of Computer Science and Communication at the Royal Institute of Technology, Stockholm, Sweden. Dr. Egerstedt's research interests include optimal control as well as modeling and analysis of hybrid and discrete event systems, with emphasis on motion planning, control, and coordination of teams of mobile robots. He has authored over 100 papers in the areas of robotics and control, and a couple of monographs that include the recent textbook "Graph Theoretic Methods in Multiagent Networks" (with M. Mesbahi; Princeton, 2010). He serves as an associate editor for *the IEEE Robotics and Automation Magazine* and the *IEEE Transactions on Automatic Control*. He is the director of the Georgia Robotics and Intelligent Systems Laboratory (GRITS Lab) and the associate director of Research at Georgia Tech's Center for Robotics and Intelligent Machines. Dr. Egerstedt has received the ECE/GT Outstanding Junior Faculty Member Award in 2005 and the CAREER award from the U.S. National Science Foundation in 2003.

Prof. Leonid Mirkin, Technion
Workshop organizer



איגוד ישראלי לבקרה אוטומטית
איגוד ישראל לבקרה אוטומטית – איב"א
Israel Association for Automatic Control

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הזמנה

ליום עיון בנושא:

**Networked Control Systems:
Modeling, Design, and Applications**

Distinguished Guest Workshop
Presented by

Prof. Magnus Egerstedt

Georgia Institute of Technology

במלון "דניאל", הרצליה

יום ב' 31 באוקטובר 2011

תודתנו נתונה למפעלים ולמוסדות
הבאים אשר תמיכתם באיב"א
מאפשרת לקיים ימי עיון מסוג זה:

אלביט מערכות – אל אופ בע"מ

רפאל – מערכות לחימה מתקדמות בע"מ

תעשייה האווירית לישראל בע"מ