

2014 14th International Conference on Control, Automation and Systems (ICCAS 2014)

October 22(Wed)-25(Sat), 2014,

KINTEX (near the downtown of Seoul), Korea

Conference website: <http://2014.iccas.org>

Email: conference@icross.org

ICCAS 2014 will be held at KINTEX, Korea on October 22-25, 2014 jointly with Robot World 2014.

The aim of the ICCAS is to bring together researchers and engineers worldwide to present their latest works, and disseminate the state-of-the-art technologies related to control, automation, robotics, and systems.

Important Dates

April 4, 2014: Submission of organized session proposals

April 18, 2014: Submission of full papers

June 20, 2014: Notification of paper acceptance

July 18, 2014: Submission of final camera-ready papers

Features of ICCAS 2014

* **Six Plenary Talks.** This year's ICCAS features six plenary talks by distinguished researchers in the areas of control, automation, robotics, and systems.

- Prof. **Frank Allgöwer** (University of Stuttgart, Germany) "TBA"
- Prof. **Harry Asada** (Massachusetts Institute of Technology, USA) "TBA"
- Prof. **Lei Guo** (Chinese Academy of Sciences, China) "**Synchronization, Intervention and Distributed Estimation**"
- Prof. **Homayoon Kazerooni** (University of California at Berkeley, USA) "**New Developments on Lower Extremity Exoskeleton Systems**"
- Prof. **Min-Jea Tahk** (Korea Advanced Institute of Science and Technology, Korea) "**Collaboration of Multiple UAVs for Transportation: Modeling and Control Design**"
- Prof. **Yutaka Yamamoto** (Kyoto University, Japan) "**New Horizon for Signal Processing - What Control Can Contribute**"

* **Free Tutorial Sessions.** If you're registered for the conference, you can attend tutorial sessions organized by leading researchers in the fields for free. Some of them are listed as:

- **Basics on Glocal Control: Concept, Fundamental Theory, and Applications to Energy Management Systems.** Glocal control means that the global purpose is achieved by only local actions of measurement and control in relatively large-scale systems such as wind turbine network, PageRank computation in Google, or consensus of multi-agent systems. Prof. **Shinji Hara** (University of Tokyo, Japan) will initiate the tutorial by the title "**Glocal Control: Concept and Fundamental Theory,**" which is followed by "**Spatio-Temporal Resolved Supply-Demands-Storage Balancing**" by Prof. **Jun-ichi Imura** (Tokyo Institute of Technology, Japan) and "**Distributed Pricing of Electric Power Networks**" by Prof. **Koji Tsumura** (University of Tokyo, Japan).
- **Basics on Differential-Algebraic Equations (DAEs).** When your dynamical system contains algebraic constraints then it is often modeled as a differential-algebraic equation (DAE), in particular when the modeling procedure is done in an automatic fashion. Come and learn how to model, interpret, and handle these kind of systems. This tutorial is led by an expert on this subject, Prof. **Stephan Trenn** (Technische Universität Kaiserslautern, Germany).
- **Basics on Collaborative Filtering and Recommendation System.** This tutorial presents the underlying concepts of collaborative filtering, including similarity measures and dimensionality reduction, and their applications to recommendation system. Prof. **Kyomin Jung** (Dept. Electrical and Computer Eng., Seoul National University, Korea) will guide us.

* **Exciting Special Sessions.** (tentative list which is expanding)

- "**Meet Professor Kazerooni**" One of our plenary speakers, Professor Kazerooni, will meet you in less formal environment. He will give a short exciting presentation, and have some conversation with the audience.

- **“How to give a GOOD presentation?”** Prof. Yamamoto (former Chair of IEEE Control Systems Society) will illustrate some typical mistakes that should be avoided for a good presentation.
- **“Contemporary Robot R&D in Korea”** Korea Evaluation Institute of Industrial Technology organizes an exhibition style session to show three successful selective cases of robot-related R&D projects, funded by Korean Government, together with the robot R&D roadmap.
- **“Control of Walking Robots with Hydraulic Actuators”** Want to build real scale robots? You may need the hydraulic actuators. Come and see what the state-of-the-art is.
- **“Control Advances in Industry”** Some experts from real industry will present their state-of-art technology used in practice. All speakers are from industrial companies.
- **“Intelligent, Multi-Purpose, Autonomous, and Decentralized Unmanned Systems”** This session is to present the up-to-date technology of autonomous systems including unmanned aerial vehicles.

* **Get your iPad (or equivalent) at the poster session.** At this year’s interactive poster session, six best poster presenters will be awarded with Apple iPad (or equivalent). Gourmet coffee and refreshments will be served during the poster session.

* **Submit your best work for outstanding paper awards and student best paper awards.** Submitted papers will be evaluated on originality, significance, and technical quality by the award committee, chaired by Prof. **Toshiharu Sugie** (IEEE Fellow, Kyoto University, Japan). See the [homepage](#) for more details.

* **Exhibit your work at the Robot World 2014 booth for free.** ICCAS 2014 runs in parallel with **Robot World 2014** (<http://www.robotworld.or.kr>) and an exhibition booth is available for free for researchers registered for the conference. See the homepage for more details.

* **Accepted papers are Indexed** in **IEEE Xplore**, **SCOPUS** and **EI compendex**, and will be submitted for indexing in Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science).

* **20th Anniversary of ICROS.** This year marks 20 years since the foundation of ICROS, the managing society of ICCAS. The 20th anniversary celebration will be held at the farewell banquet on the last day of the conference.

* **Tour Programs.** Korea-DMC (Destination Management Company) is developing many exciting local tour programs.

* **Learn More at Tutorials and Workshops.** Very instructive tutorials and workshops are organized, which will be held before the main conference, including:

- (TBA) An expert and the author of a number of books in sliding mode control, Prof. **Christopher Edwards** (University of Exeter, United Kingdom), will deliver a full-day tutorial.

- **Filtering Theory with Applications to Autonomous Navigation.** Two experts, Prof. **Gyu In Jee** (Konkuk University, Korea) and Prof. **Chan Gook Park** (Seoul National University, Korea), will guide you the world of filtering theory.

Thank you for your contributions and we look forward to seeing you at ICCAS 2014.

Sincerely yours,
ICCAS 2014 Organizing Committee