2nd International Conference on Control and Fault-Tolerant Systems, SysTol'13

October 9-11, 2013 – Nice, France – Extended Submission Deadline May 15th, 2013

http://www.systol13.org

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Important dates

Submission of draft papers:
~~April 30th~~ May 15th 2013
Notification of acceptance:
~~July 1st~~ July 10th 2013
Final version due:
September 1st, 2013

Financial Sponsor

Centre de Recherche en Automatique de Nancy

Technical Co-Sponsors

IEEE Control Systems Society
IEEE Reliability Society
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Scope of SysTol'13

Faults/failures in technical systems may have many undesired consequences as damage to technical parts of plants, endangering of human life or pollution of the environment. Equipment failures may also have profound negative impact on production costs and product quality. The development of fault diagnosis methods allowing early detection of faults/failures is crucial in order to protect complex manufacturing machineries, to increase human life safety and to support decision making on emergency actions and repairs. Moreover, in highly automated industrial systems where maintenance or repair cannot be carried-out immediately, it is crucial to employ fault-tolerant control systems capable of ensuring acceptable performance even in the presence of faults. The conference will bring together academics, engineers and practitioners active in the fields of fault diagnosis, fault tolerant control and their application in process monitoring and maintenance. The conference main aims are:

- to showcase current research results and recent developments of intelligent techniques;
- to present practical applications and emphasize open problems;
- to provide a forum for industry to signal its needs and priorities.

Three years ago, the 1st International Conference on Control and Fault-Tolerant Systems (Systol'10) was a success and demonstrated the demand for establishing a permanent scientific forum in the general area of system monitoring, fault diagnosis and fault-tolerant control. The Second conference on Control and Fault-Tolerant Systems (Systol'13), through its technical program, will provide a unique opportunity for the academic and industrial community to formulate new challenges, share solutions and discuss future research directions. Presentations of theoretical results accompanied by practice related experiments are encouraged.

Plenary/Semi Plenary speakers

Doctor Sajjad (Fekri) Fekriasl
ALSTOM Grid, UK
Robust Control Systems for Modern Power Converters: Applications and Challenges

Professor Jan Maciejowski
Cambridge University, UK
Fault tolerant control using Gaussian processes and model predictive control

Doctor Alexander Horch
ABB Corporate Research, Germany
Industrial application of condition monitoring and diagnosis - prospects and pitfalls?

Professor Olivier Sename
Grenoble Institute of Technology, France
LPV methods for fault-tolerant vehicle dynamic control

Professor Pierre-Etienne Labeau
Université Libre de Bruxelles, Belgium
Adapting dynamic reliability from probabilistic safety analysis to fault-tolerant control?

Professor Youmin Zhang
Concordia University, Canada
Challenges, Opportunities, and Developments on Fault-Tolerant Control with Applications to Autonomous Unmanned Systems

Paper submission/proceedings

Papers must be submitted electronically via web upload only. Full papers should be submitted in standard IEEE A4 paper and double-column format for conferences. Six pages are allowed for each paper. Submitted papers will undergo a peer review process, co-ordinated by the Program Chairs and the IPC. Please visit the conference website for further information. Proceedings of the conference will be produced in compliance with IEEE Xplore's PDF requirements for immediate inclusion in the IEEE Electronic Library on IEEE Xplore.

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