E-LETTER on Systems, Control, and Signal Processing
Issue 319
April 2015

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Welcome to the April issue of the Eletter, available electronically here.
To submit new articles, go "Article Submissions" on the Eletter website
To unsubscribe, please send an email with the subject line "Eletter Unsubscribe".

The next Eletter will be mailed out in the beginning of May 2015.

Contents

1. IEEE CSS Headlines

1.1. IEEE CSS Video Clip Contest 2015

Contributed by: Frank Allgöwer, allgower@ist.uni-stuttgart.de

Because of the success of the first CSS Video Clip Contest in 2014, the Control systems Society decided to sponsor a second CSS Video Clip Contest for the year 2015 with submission deadline July 1, 2015.
All details are announced at the CSS Video Clip Contest Website at http://www.ieeecss.org/video-contest

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1.2. IEEE Control Systems Society Publications Content Digest

Contributed by: Elizabeth Kovacs, ekovacs2@nd.edu

CSS Publications Content Digest
The IEEE Control Systems Society Publications Content Digest is a novel and convenient guide that helps readers keep track of the latest published articles.
The CSS Publications Content Digest, available at http://ieeecss.org/publications-content-digest provides lists of current tables of contents of the periodicals sponsored by the Control Systems Society. Each issue offers readers a rapid means to survey and access the latest peer-reviewed papers of the IEEE Control Systems Society.
The index in the Digest contains the Table of Contents for our 3 journals (Transactions on Automatic Control (TAC), Transactions on Control Systems Technology (TCST), and Control Systems Magazine (CSM)) with hyperlinks to the abstracts as well as the full articles in Xplore. Since TCST and CSM are published bimonthly, and TAC is published monthly, we will post the corresponding two TOCs in each (monthly) Digest. We also include links to the Society's sponsored Conferences to give readers a preview of upcoming meetings.

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1.3. IEEE Transactions on Control of Network Systems

Contributed by: Denise Joseph, dejoseph@bu.edu

Table of Contents IEEE Transactions on Control of Network Systems Volume 2 (2015), Issue 1 (March)
Please note that the contents of the IEEE-Transactions on Control of Network Systems, with links to the abstracts of the papers are available on http://sites.bu.edu/tcns/tcns-march-2015/

- Convex Structured Controller Design in Finite Horizon , K. Dvijotham, E. Todorov, and M. Fazel p. 1
- Distributed Sensor Fault Diagnosis for a Network of Interconnected Cyber-Physical Systems, V. Reppa, M. M. Polycarpou, and C. G. Panayiotou , p 11
- Graph Matching-Based Formation Reconfiguration of Networked Agents With Connectivity Maintenance, Z. Kan, L. Navaravong, J. M. Shea, E. L. Pasiliao, Jr., and W. E. Dixon p 24
- Signaling in Sensor Networks for Sequential Detection , A. Nayyar and D. Teneketzis, p 36
- Optimal Compression in Natural Gas Networks: A Geometric Programming Approach, S. Misra, M. W. Fisher, S. Backhaus, R. Bent, M. Chertkov, and F. Pan p 47
- Throughput Optimality and Overload Behavior of Dynamical Flow Networks Under Monotone Distributed Routing,, G. Como, E. Lovisari, and K. Savla, p 57
- Global Exponential Stability for Discrete-Time Networks With Applications to Traffic Networks, I. Karafyllis and M. Papageorgiou, p 68

- Ergodic Randomized Algorithms and Dynamics Over Networks, C. Ravazzi, P. Frasca, R. Tempo, and H. Ishii, p.78
- Dynamic Pricing Control for Constrained Distribution Networks With Storage, M. Burger, C. De Persis, and F. Allgower, p 88

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1.4. IEEE Transactions on Automatic Control

Contributed by: Elizabeth Kovacs, ekovacs2@nd.edu

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IEEE Transactions on Automatic Control
Volume 60 (2015), Issue 4 (April)

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- Multi-Agent Deployment in 3-D via PDE Control. J. Qi, R. Vazquez, M. Krstic p. 891
- The Asymptotic Consensus Problem on Convex Metric Spaces. I. Matei, J. S. Baras p. 907
- Linear Convergence Rate of a Class of Distributed Augmented Lagrangian Algorithms. D. Jakovetic, J. M. F. Moura, J. M. F. Xavier p. 922
- An Optimizer's Approach to Stochastic Control Problems with Nonclassical Information Structures. A. A. Kulkarni, T. P. Coleman p. 937
- Constructive Epsilon-Nash Equilibria for Nonzero-Sum Differential Games. T. Mylvaganam, M. Sassano, A. Astolfi p. 950
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- A Framework for the Event-Triggered Stabilization of Nonlinear Systems. R. Postoyan, P. Tabuada, D. Nesic, A. Anta p. 982
- State Estimation and Fault Diagnosis of Time Labeled Petri Net Systems with Unobservable Transitions. F. Basile, M. P. Cabasino, C. Seatzu p. 997
- Optimal Kullback-Leibler Aggregation via Information Bottleneck. B. C. Geiger, T. Petrov, G. Kubin, H. Koeppl p. 1010
- Dissipativity-Preserving Model Reduction for Large-Scale Distributed Control Systems. T. Ishizaki, H. Sandberg, K. Kashima, J-i. Imura, Kazuyuki Aihara p. 1023
- Stability criteria of random nonlinear systems and their Applications. Zhaojing Wu p. 1038
- Weight and Time Recursions in Dynamic State Estimation Problem with Mixed-Norm Cost Function. P. Akimov, A. Matasov p. 1050

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- Finite-Time Consensus Using Stochastic Matrices with Positive Diagonals. J. M. Hendrickx, G. Shi, K. H. Johansson p. 1070
- Adaptive Control of Nonlinear Time-Delay Systems with Application to a Two-Stage Chemical Reactor. X. Zhang, Y. Lin p. 1074
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- On Simultaneous Stabilization by Feedback of Finitely Many Oscillators. E.P. Ryan
- Self-triggered Best Response Dynamics for Continuous Games. A. Cortés, S. Martinez p. 1115
- A Maximum Principle for Optimal Control of Discrete-time Stochastic Systems with Multiplicative Noise. X. Lin, W. Zhang p. 1121
- An Upper Bound on the Convergence Time for Quantized Consensus of Arbitrary Static Graphs. S. Shang, P. W. Cuff, P. Hui, S. R. Kulkarni p. 1127
- Finite-Time Consensus with Disturbance Rejection by Discontinuous Local Interactions in Directed Graphs. M. Franceschelli, A. Pisano, A. Giua, E. Usai p. 1133
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- Local Stabilization of Switched Affine Systems. L. Hetel, E. Bernuau p. 1158
- Folding Algorithm for Policy Evaluation for Markov Decision Processes with Quasi-Birth Death Structure. Y. Yassir, L. B. White p. p. 1164
- Comments on "A Controllability Counterexample" and the Continuation Lemma. D. L. Elliott, L. Tie p. 1169

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1.5. IEEE CSS Outreach Fund

Contributed by: Daniel E. Rivera, daniel.rivera@asu.edu

The IEEE CSS Outreach Task Force is pleased to announce that the next window for submission of proposals to the IEEE-CSS Outreach Fund will be held from May 4 to 25, 2015. General information regarding the program can be found in: http://www.ieeecss.org/general/control-systems-society-outreach-fund
Inquiries, including a request for application forms, should be made directly to Daniel E. Rivera, Outreach Task Force Chair, at daniel.rivera@asu.edu.

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1.6. IEEE Multi-Systems Control Conference

Contributed by: Rebecca Deal, rebeccad@icmsaust.com.au

IEEE Multi-Systems Control Conference 2015 (MSC2015)
21-23 September 2015,
Novotel Manly Pacific, Sydney, Australia

We have received a number of requests to extend the MSC2015 Paper submission deadline.
The committee has now extended the deadline as follows
Invited sessions 2400hrs Pacific Standard Time (GMT - 7hrs) 8 April 2015
Workshops and Papers 2400hrs Pacific Standard Time (GMT - 7hrs) 15 April 2015

Why submit to IEEE MSC2015?

The aim of the conference is to provide an opportunity for researchers and practitioners from different areas of control engineering to formulate new challenges, to discuss the state-of-the-art and the future directions in advanced control technology, intelligent systems and computational methods for control systems design. The major focus of the conference is on the applications of feedback control systems in industry and science along with theoretical results accompanied by practice related experiments.

The topics covered include applications of feedback control engineering to areas such as marine systems, agricultural systems, mining systems, biomedical and chemical processes, biological and pharmaceutical processes, metal processing, power systems, mechanical systems and robotics, mechatronic systems, telecommunications, vehicular and traffic control, and transportation systems. The conference will also cover new developments in control theory including system identification, predictive and adaptive control, robust control, fuzzy and neural control, distributed intelligent networked systems, architecture and software for intelligent control, learning and adaptive systems, multi-sensor integration and fusion, and networked systems and control.

Author Information:

All conference submissions must be done through PaperPlaza. Authors of accepted papers are expected to attend the MSC and present their work.

For further information please visit https://css.paperplaza.net/conferences/scripts/start.pl or the conference website on www.msc2015.org

If you have any questions regarding the paper submission please contact the Organisers css-ceb@paperplaza.net

About the Conference:

The MSC conference is organised annually under the auspices of the IEEE Control Systems Society. The main Conference will run for three days between 21 - 23 September at the Novotel Manly Pacific.

Who should attend MSC2015?

Academics, research students, engineers working in industries.

Why should they attend MSC2015?

The MSC2015 will enable participants to interact with leading Automatic Control researchers from around the world and to find out about state-of-the art research results. The participants will also see presentations from internationally renowned plenary and keynote speakers. Papers accepted by MSC2015 will be published in the conference proceedings and in IEEE Xplore.

Preliminary Program available:

To assist in your planning the MSC2015 Organising Committee is pleased to unveil the preliminary program at a glance. The MSC2015 Conference will build on the foundations of the previous events through a Program which will explore the latest information and current research in our field.

Follow this link for program information http://www.msc2015.org/program.php

Venue:
The conference will be held at Novotel Sydney Manly Pacific which is perfectly located to enjoy the very best of the Australian lifestyle. Located directly opposite Manly Beach and only 15 minutes from Sydney's CBD by the Manly Fast Ferry or a leisurely 30 minutes via ferry.
Manly is nested between the Pacific Ocean and Sydney Harbour, a beautiful peninsula of 18 beaches, hidden coves and inlets surrounded by National Parks, Aboriginal sites and historic landmarks. A beachside oasis for surfing, swimming and sailing, scenic walks, international dining, shopping, galleries and festivals.

Dates and deadlines:
Submission invited sessions: April 8, 2015
Technical paper submission and workshop proposals: April 15, 2015
Notification of acceptance: July 1, 2015
Preliminary program ready: July 15, 2015
Final paper due: August 15, 2015
Early registration ends: August 15, 2015
Conference program ready: September 1, 2015
Conference dates September: 21-23, 2015

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Telephone: +61 (0) 2 9254 5000
Fax: +61 (0) 2 9251 3552
Email: info@msc2015.org

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2. Books

2.1. Large-Scale Networks in Engineering and Life Sciences

Contributed by: Clemens Heine, Clemens.Heine@birkhauser-science.com

This edited volume from Birkhäuser's series in Modeling and Simulation in Science, Engineering and Technology, provides insights into and tools for the modeling, analysis, optimization, and control of large-scale networks in the life sciences and in engineering. The chapters of this book present the basic concepts and theoretical foundations of network theory and discuss its applications in different scientific areas such as biochemical reactions, chemical production processes, systems biology, electrical circuits, and mobile agents. The aim is to identify common concepts, to understand the underlying mathematical ideas, and to inspire discussions across the borders of the various disciplines. It is a concise introduction to the geometric theory of ODEs with applications in (bio-) chemical reaction networks and the chemical separation processes. The book consists of up-to-date introduction to the modern concepts for network-/graph-based mathematical modeling in system biology.
The book originates from the interdisciplinary summer school "Large Scale Networks in Engineering and Life Sciences" hosted by the International Max Planck Research School Magdeburg, September 26-30, 2011, and will therefore be of interest to mathematicians, engineers, physicists, biologists, chemists, and anyone involved in the network sciences.
The editors of the book are - Prof. Dr. Peter Benner, Prof. Dr.-Ing. Rolf Findeisen, Prof. Dr. Dietrich

Flockerzi, Prof. Dr.-Ing. Udo Reichl and Prof. Dr.-Ing. Kai Sundmacher.
For more information on this book or to read chapters from it, please visit http://goo.gl/kxpnkI.

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3. Journals Contents

3.1. Contents: Nonlinear Studies

Contributed by: Seenith Sivasndaram, seenithi@gmail.com

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Nonlinear Studies
Vol 22, No 1 (2015)

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3.2. Contents: Mathematics in Engineering, Science and Aerospace

Contributed by: Seenith Sivasndaram, seenithi@gmail.com

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Mathematics in Engineering, Science and Aerospace
Vol 6, No 1 (2015)

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3.3. Contents: Automatica

Contributed by: Elisa Capello, automatica@polito.it

Table of Contents
Automatica
Vol. 54, April 2015
http://www.sciencedirect.com/science/journal/00051098/54

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3.4. Contents: International Journal of Applied Mathematics and Computer Science

Contributed by: AMCS, amcs@uz.zgora.pl

Table of Contents
International Journal of Applied Mathematics and Computer Science (AMCS)
2015, Volume 25, Number 1 (March)

Special issue on "Safety, Fault Diagnosis and Fault Tolerant Control in Aerospace Systems" (edited by Silvio Simani and Paolo Castaldi)

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3.5. Contents: Journal of Control and Decision

Contributed by: Changyun Wen, ecywen@ntu.edu.sg

Table of Contents
Journal of Control and Decision
Volume 2, Issue 1, March 2015

Special Issue: Selected Keynotes and Distinguished Lectures of 2014 Chinese Control and Decision Conference.

This issue is free for access online at http://www.tandfonline.com/toc/tjcd20/2/1#.VQpOLrcrjIU until April 30, 2015.

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3.6. Contents: Control Theory and Technology

Contributed by: Zou Tiefeng, tfzou@scut.edu.cn

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Control Theory and Technology
(The original title: Journal of Control Theory and Applications)
Vol. 13, No. 1, February 2015
http://www.springer.com/engineering/control/journal/11768
http://jcta.alljournals.ac.cn/cta_en/ch/index.aspx

Special issue on learning and control in cooperative multi-agent systems

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3.7. Contents: Asian Journal of Control

Contributed by: Fu Li-Chen, lichen@ntu.edu.tw

Table of Contents
Asian Journal of Control
Vol.17, No.2 March, 2015

Special Issue on "Tensor Product (TP) Model Transformation-based Control System Design"

- Quasi-min-max Model Predictive Control for Image-Based Visual Servoing with Tensor Product Model Transformation. Wenfang Xie, Tingting Wang, G.D. Liu and Yimin Zhao
- Gain-Scheduled H_∞ Control for Tensor Product Type Polytopic Plants. Sunan Chumalee and James Whidborne
- Output Feedback Control of a Dual-Excenter Vibration Actuator via Qlpv ModelaAnd TP Model Transformation. József Kuti, Péter Galambos and Ákos Miklós
- Control of 3D Tower Crane Based on Tensor Product Transformation with Neural Friction Compensation. Jadranko Matusko, Sandor Iles, Fetah Kolonic and Vinko Lesic
- Integral Operators in Relation to the HOSVD-Based Canonical Form. András Rövid, László Szeidl, Peter Varlaki
- TP Model Transformation via Sequentially Truncated Higher-order Singular Value Decomposition. Lin-Zhang Lu and Junjun Pan
- The Stochastic Robust Model Predictive Control of Shimmy Vibration in Aircraft Landing Gears. Wenfang Xie and Amir Hajiloo
- TP-tau Model Transformation: A Systematic Modelling Framework To Handle Internal Time Delays in Control Systems. Péter Galambos and Peter Baranyi
- TP Model Manipulation for Control Design Optimization and General Stability Verification. Péter Baranyi
- Robust Parameter Dependent Receding Horizon H_inf Control of Flexible Air-Breathing Hypersonic Vehicles with Input Constraints. Wei Qin
- LPV Switching Attitude Tracking Control for a Near Space Hypersonic Vehicle Via Multiple Lyapunov Functions. Yiqing Huang, Changyin Sun, and Chengshan Qian

Regular Issue

- Adaptive Control Design for A Class of Uncertain High-Order Nonlinear Systems with Time-Delay. Zong-Yao Sun and Yungang Liu
- Stability Criterion of 2-D Positive Systems with Unbounded Delays Described by Roesser Model. Xingwen Liu
- H_∞ Fault Detection for Two-Dimensional T-S Fuzzy Systems In FM Second Model. Lanning Wang and Weiqun Wang
- Online Speed Controller Scheme Using Adaptive Supervisory TSK-fuzzy CMAC for Vector Controlled Induction Motor Drive. Chwan-Lu Tseng, Shun-Yuan Wang and Chun-Jung Chiu
- Non-Rule Based Fuzzy Approach for Adaptive Control Design of Nonlinear Systems. Liang Luo, yinhe wang, Branko Novakovic, and Josip Kasac
- Event-Triggered Consensus Control of Second-Order Multi-Agent Systems. Xia Chen and Fei Hao
- Optimization of Coordinate Transformation Matrix for H_∞ Static-Output-Feedback Control of Linear Discrete-Time Systems. Zhi-Yong Feng, Li Xu, Jin-Hua She and Xuexun Guo
- A Lyapunov Based Multi-level Controller for Semi-active Suspension System with an MRF Damper. Feng Tyan and Tu Shunhsu
- Design of Traffic Safety Control Systems for Railroads and Roadways Using Timed Petri Nets. Yi-Sheng Huang, Yi-Shun Weng, Yen-Liang Pan and MuDer Jeng
- Active Disturbance Rejection Control Applied to a Delta Parallel Robot In Trajectory Tracking Tasks. Alberto Luviano-Juarez, Mario Ramírez-Neria, Hebertt Sira-Ramírez and Alejandro Rodríguez-Ángeles

- Particle Swarm Optimization for Vehicle Positioning Based on Robust Cubature Kalman Filter. Jiang Liu, Baigen Cai and Yunpeng Wang
- Synchronization for Time-Delayed Coupling Complex Dynamical Networks with Different Dimensional Nodes via Decentralized Dynamical Compensation Controllers. Lili Zhang, Yinhe Wang, Qinruo Wang and Siying Zhang
- Optimal Control of Midazolam Infusion for Post Operative Patients in Intensive Care Units. Nader Meskin, Regina Padmanabhan and Wassim M. Haddad
- Robust Dynamic Output Feedback Guaranteed Cost Control for Discrete-Time Systems with Time-Varying Delays. Eva Gyurkovics and Tibor Takacs

Brief Paper

- Decentralized Output Feedback Protocol for Consensus Control of A Class of Nonlinear Dynamics Networks. Zhenxing Li, Haibo Ji and jie sheng
- A Novel Multi-Step Model Predictive Control Scheme for Multi-Input Systems. Langwen Zhang and Jingcheng Wang
- Amplifier Gain Tuning-based Slotine-Li Adaptive Manipulator Control. Chih-Chen Yih
- Passive Location Using TDOA Measurements From Compass Satellite Illuminators. Panlong Wu, Xingxiu Li, Lianzheng Zhang and Yuming Bo
- Guaranteed Cost Consensus for Multi-Agent Systems with Fixed Topologies. Zhong Wang, Jianxiang Xi, Zhicheng Yao and Guangbin Liu

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3.8. Contents: International Journal of Control, Automation, and Systems

Contributed by: Young-Hoon Joo, journal@ijcas.com

Table of contents
International Journal of Control, Automation, and Systems (IJCAS)
Vol. 13, No. 2, April 2015
ISSN: 1598-6446
http://www.springer.com/engineering/robotics/journal/12555

- Approximation-based Adaptive Tracking Control of Nonlinear Pure-feedback Systems with Time-varying Output Constraints. Bong Su Kim and Sung Jin Yoo pp.257-265
- Optimal Control Problem of Singular Boolean Control Networks. Min Meng and Jun-e Feng pp.266-273
- Robust Observer-based Sensor Fault Reconstruction for Discrete-time Systems via a Descriptor System Approach. Qingxian Jia, Huayi Li, Yingchun Zhang, and Xueqin Chen pp.274-283
- LMI-based Robust Sampled-data Stabilization of Polytopic LTI Systems: A Truncated Power Series Expansion Approach. Dong Hwan Lee and Young Hoon Joo pp.284-291
- Optimal Tracking Control for Discrete-time Systems with Multiple Input Delays under Sinusoidal Disturbances. Shi-Yuan Han, Dong Wang, Yue-Hui Chen, Gong-You Tang, and Xi-Xin Yang pp.292-301
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3.9. Contents: Control Engineering Practice

Contributed by: Tobias Glück, cep@acin.tuwien.ac.at

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Control Engineering Practice
Volume 37
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Call for papers for Special Issue on Industrial Practice of Fault Diagnosis and Fault Tolerant Control

- Xianming Ye, Xiaohua Xia, Lijun Zhang, Bing Zhu, Optimal maintenance planning for sustainable energy efficiency lighting retrofit projects by a control system approach,Pages 1-10
- Frank Boeren, Tom Oomen, Maarten Steinbuch, Iterative motion feedforward tuning: A data-driven approach based on instrumental variable identification,Pages 11-19
- R. Hoogendijk, M.J.G. van de Molengraft, A.J. den Hamer, G.Z. Angelis, M. Steinbuch, Computation of transfer function data from frequency response data with application to data-based root-locus,Pages 20-31
- W. Kemmetmüller, S. Eberharter, A. Kugi, Controller design and experimental validation of a very low frequency high-voltage test system,Pages 32-42
- Yong Li, Fang Liu, Yijia Cao, Delay-dependent wide-area damping control for stability enhancement of HVDC/AC interconnected power systems,Pages 43-54
- Mhia Md. Zaglul Shahadat, Takeshi Mizuno, Yuji Ishino, Masaya Takasaki, Active vibration isolation using negative stiffness and displacement cancellation controls: Comparison based on vibration isolation performance,Pages 55-66
- Sajjad Pourmohammad, Afef Fekih, Dmitri Perkins, Stable Queue Management in communication networks,Pages 67-79
- Michel Dominici, Rui Cortesão, Cascade force control for autonomous beating heart motion compensation,Pages 80-88

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3.10. CFP: Asian Journal of Control

Contributed by: Fu Li-Chen, lichen@ntu.edu.tw

Call for Papers
Special Issue on "Recent Emerging Technologies in Atomic Force Microscopy"
http://www.ajc.org.tw

Nano-technology is an important research area in the 21st century. There are many relevant applications in various industries, such as for scientific measurement and for high tech. business areas. Atomic Force Microscopy (AFM) opens a new window to the nano-world. It features a high resolution for imaging and manipulating samples on a nanoscale in vacuum, gases, or liquid operational environments, and has now become a widely used tool in the sectors of, for example, biological sciences, industrial inspection, and medical testing, etc. As a result, AFM is becoming more and more important as one of the key approaches in next generation nano-technology.

This special issue invites original articles that address both theoretical and application-oriented papers, including innovative mechanism design, control technological improvements, new scanning methods, and any related technologies in AFM. Topics of potential interest include, but are not limited to:

. AFM mechanism design
. AFM control methods
. New scanning methods in AFM
. AFM actuators or sensors
. Modeling and simulation of AFM systems
. Applications of AFM systems

About AJC

The Asian Journal of Control, an ACA (Asian Control Association) affiliated journal, is the first international journal originating from the Asian Pacific region and being recognized by the major body of control researchers in this region. The Asian Journal of Control publishes bimonthly high-quality papers on original theoretical and experimental research and development in the areas of control, involving all facets of control theory and its application. Functionally, this journal not only provides a forum where control researchers and practitioners can exchange their knowledge and experiences in control areas, but also serves as an educational means for students and any others who would like to learn new topics in this technical area. The journal aims to be a key interface between control communities within the Asian Pacific region and throughout the world and is listed by Science Citation Index Expanded.

Guest Editors:

Prof. Ian Petersen
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Email: i.r.petersen@gmail.com

Prof. Reza Moheimani
School of Electrical Engineering and Computer Science, The University of Newcastle, Australia
Email: Reza.Moheimani@newcastle.edu.au

Important Dates:

September 30, 2015 Deadline for submissions
January 31, 2016 Completion of First Review
May 31, 2016 Completion of Final Review
June 30, 2016 Receipt of Final Manuscript
January 1, 2017 Publication (Tentatively Vol.19, No. 1)

How to submit:

Potential authors are encouraged to upload the electronic file of their manuscript (in pdf format) through the journal's online submission website: http://mc.manuscriptcentral.com/asjc. If you encounter any submission problem, feel free to contact Prof. Li-Chen Fu.

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All submission should include a title page containing the title of the paper, an abstract and a list of keywords, authors' full names and affiliations, complete postal and electronic address, phone and fax numbers. The contacting author should be clearly identified. For detailed submission guidelines, please visit http://wileyonlinelibrary.com/journal/asjc.

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3.11. CFP: Mathematical Problems in Engineering

Contributed by: Xinggang Yan, x.yan@kent.ac.uk

Call for papers for the Journal Mathematical Problems in Engineering
Special Issue on: "Advanced Control of Complex Dynamical Systems with Applications"
Topics of the special issue include, but are not limited to:

- Decentralized control
- Variable structure control
- Singular systems control
- Time delay systems
- Fuzzy control and impulsive control
- Robust observer design and parameters identification
- Fault detection and fault tolerant control
- Analysis and control of stochastic systems
- Applications of advanced control systems

Important Dates:
Submission deadline: July 31, 2015.
First round of reviews: October 23, 2015.
Publication date: December 18, 2015.

Lead Guest Editor: Xinggang Yan
Guest Editors: Sarah Spurgeon, Qingling Zhang and Leonid Fridman

The detailed information is available from the following website:
http://www.hindawi.com/journals/mpe/si/401821/cfp/

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4. Conferences

4.1. International Conference on Computational Logistics

Contributed by: Rudy Negenborn, r.r.negenborn@tudelft.nl

6th International Conference on Computational Logistics
September 23-25, 2015 Delft, The Netherlands

Theme: Coordination for real-time logistics
with proceedings published in the "Lecture Notes on Computer Science" and a special issue of "Transportation Research Part E: Logistics" http://realtimelogistics.info/iccl

The 6th International Conference on Computational Logistics (ICCL'15) will be held in Delft (The Netherlands), hosted by Delft University of Technology. This conference provides a remarkable opportunity for academia, industry, and governmental agencies to share solutions, address new challenges, and discuss future research directions on the application of information, communication, optimization and control technologies to logistic activities. The conference will feature keynote lectures, technical sessions, tutorials, on-site computational logistics experience, an optional one-day pre-conference workshop, and a social program, in an informal and inspiring setting.
High quality papers in the field of logistics management, operations, control, and information systems are

welcomed. Of particular interest are papers on heuristic and formal approaches as well as on innovative ICT tools for decision support and control for improving coordination in logistic systems at the operational level. Full papers presented at the conference will be published in the conference proceedings, published in Springer's Lecture Notes in Computer Science (LNCS), indexed by ISI Web of Science, Scopus, ACM Digital Library, DBLP, MathSciNet, a.o. Authors of selected high-quality papers will be invited to submit extended versions of their papers for possible publication in a special issue of a Transportation Research Part E: Logistics.

Technical topics of the conference include but are not limited to:
Innovative concepts for transport over water, rail, road, and air; Integrated planning and control of logistic nodes, their interconnections and their processes; Formal methods for decision support in operational (port, terminal, hinterland) logistics; Planning tools and tool-based environments for design of logistics supra- and infrastructure; Industrial applications of optimization and control for logistics; Multi-agent systems and distributed control for logistics; Automatic control and autonomous (water, road, air) transport systems for efficient logistics; Heuristics and meta-heuristics implementations in logistics related models; Computational analysis and evaluation of logistics induced environmental impact; Theoretical and empirical analysis of logistics operations; Modeling, simulation and evaluation of the involved actors and organizations; Optimal strategies and operations of logistics service providers; Consolidation and distribution for agents or shippers within the logistics business; Cooperation and negotiation in maritime supply chains; Integration of ports in intermodal hinterland systems; Concurrent and parallel computing for large-scale logistics planning; Information systems supporting big data/cloud technology for logistical decision support.

Paper submission:
Manuscripts and session proposals should follow the style guidelines provided on the conference website (http://realtimelogistics.info/iccl) (with max 15 pages for full papers and 2 for abstracts) and submitted via Easychair.

Important dates:
April 1, 2015 - Submission deadline full papers for proceedings
May 1, 2015 - Submission deadline abstracts for presentation only
May 15, 2015 - Notification of acceptance/rejection
July 1, 2015 - Submission of camera-ready papers
September 22, 2015 - ICCL'15 pre-conference workshop
September 23-25, 2015 - ICCL'15 conference

More information or questions:
Contact us via http://realtimelogistics.info/iccl/ or iccl-2015@tudelft.nl.
We look forward welcoming you at ICCL'15,
Rudy Negenborn (General Chair)
Delft University of Technology, The Netherlands

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4.2. World Congress: Mathematical Problems in Engineering, Aerospace and Sciences

Contributed by: Seenith Sivasundarm, seenithi@gmail.com

World Congress: Mathematical Problems in Engineering, Aerospace and Sciences
When: 05-08 July 2016
Where: La Rochelle, France, University of La Rochelle

Website: http://www.icnpaa.com
http://www.internationalmathematics.com/icnpaa/

ICNPAA's AIM

Mathematical Problems in Engineering, Aerospace and Science have stimulated cooperation among scientists from a variety of disciplines. Developments in computer technology have additionally allowed for solutions of mathematical problems. This international forum will extend scholarly cooperation and collaboration, encouraging the dissemination of ideas and information.

The conference will have a pool of active researchers, with a proper balance between academia and industry, as well as between senior and junior researchers, including graduate students and post-doctoral fellows. It is anticipated that such a balance will provide both senior and junior researchers an opportunity to interact and to have a wider picture of recent advances in their respective fields. The conference, especially, enables the setting up of new interdisciplinary research directions among its participants by establishing links with world renowned researchers, making possible joint international projects that will no doubt bring about fresh and innovative ideas and technologies in engineering, aerospace and sciences.

The proceedings will be published by the American Institute of Physics (AIP).

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4.3. IFAC Symposium on Nonlinear Control Systems

Contributed by: Arthur J. Krener, ajkrener@nps.edu

First Announcement
NOLCOS 2016, 10th IFAC Symposium on Nonlinear Control Systems
Marriott Hotel Monterey, California, USA. August 23-25, 2016

Every three years the International Federation for Automatic Control (IFAC) has organized a Nonlinear Control System Symposium (NOLCOS). They have been held in Capri (I) 1988, Bordeaux (F) 1992, Lake Tahoe (USA) 1995, Enschede (NL) 1998, Saint Petersburg (RUS) 2001, Stuttgart (DE) 2004, Pretoria (ZA) 2007, Bologna (IT) 2010, and Toulouse (FR) 2013. The 10th NOLCOS will be held in beautiful Monterey, CA, USA. The scope of these symposia are the theory and applications of nonlinear control systems. With advances in science, technology and computing these topics have grown in importance. NOLCOS is acknowledged as the major international gathering of leading experts in the field of nonlinear control from industry and academia.

NOLCOS in Monterey aims at strengthening worldwide contacts between academia and industry to build up new networks and cultivate existing relations. High-level speakers will present the global spectrum of nonlinear control systems, state-of-the-art applications and developing directions. NOLCOS 2016 is also meant as a forum for young scientists from all over the world. They will be given the opportunity to introduce their research ambitions and scientific work to an audience of international experts.

The Monterey Peninsula is an internationally known tourist destination famous for its beautiful scenery, mild climate and excellent restaurants. It is within easy driving distance to Silicon Valley, the world center of high-tech, and several universities including Stanford, UC Berkeley, UC Santa Cruz, and the Naval Postgraduate School.

Important Dates:
Opening paper submission: September 15, 2015
Deadline for paper submission: January 18, 2016
Acceptance/Rejection: April 15, 2016

Final manuscript submission: May 25, 2016
Early registration Deadline: June 10, 2016

Conference Website: https://www.math.ucdavis.edu/static/conferences/nolcos_2016/

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4.4. International Conference on System Theory, Control and Computing

Contributed by: Sergiu Caraman, Sergiu.Caraman@ugal.ro

19th International Conference on System Theory, Control and Computing - ICSTCC 2015
October 14-16, 2015, Cheile Gradistei - Fundata Resort, Romania
Website: http://www.aie.ugal.ro/icstcc2015

ICSTCC 2015 aims at bringing together under a unique forum, scientists from Academia and Industry, to discuss the state of the art and the new trends in System Theory, Control and Computer Engineering, promoting professional interactions and fellowship.

ICSTCC 2015 is technically co-sponsored by IEEE Control Systems Society.
In accordance with the Letter of Acquisition signed with IEEE, the Proceedings of ICSTCC 2015 will be submitted for inclusion in IEEE Xplore Digital Library. The Proceedings will also be submitted for indexing in Thomson Reuters Conference Proceedings Citation Index (formerly ISI Proceedings).

ICSTCC 2015 location is Cheile Grădiştei - Fundata Resort. The resort offers beautiful panoramas for the Piatra Craiului mountains and Bucegi mountains, the freshness and the privacy make the complex to be a place full of beauty and peace. We are planning a number of field trips: Bran Castle (Dracula's Castle), Brasov City or hiking on the surrounding mountains.

Confirmed keynote speakers:
Ioan Dumitrache (Romania): "Bio-inspired Techniques for Autonomous Control Systems"
Visakan Kadirkamanathan (UK): "Spatio-Temporal Model Estimation and Identification - Applications in Engineering, Life and Social Sciences"
Markos Papageorgiou (Greece): "Freeway Traffic Control"
Olivier Sename (France): "The LPV approach: the key to controlling vehicle dynamics?"
Alain Vande Wouver (Belgium): "Modeling and control of SMB chromatographic separation plants"

Important dates:

- May 1, 2015: Invited Session proposal submission
- May 10, 2015: Initial paper submission
- July 1, 2015: Notification of acceptance
- August 1, 2015: Final submission and registration payment

The main areas of interest are: Automation and Robotics; Computer Science and Engineering; Electronics and Instrumentation
All papers should be submitted via the online submission system at
http://controls.papercept.net/conferences/scripts/start.pl#STCC15
For further information please contact the organizing committee at: icstcc2015@ugal.ro.

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4.5. ASME Dynamic Systems and Control Conference

Contributed by: Rifat Sipahi, rifat@coe.neu.edu

The 2015 ASME Dynamic Systems and Control (DSC) Conference will be held Wednesday through Friday, October 28-30, at the Hilton Columbus Downtown Hotel in Columbus, Ohio, under the leadership of General Chair Giorgio Rizzoni and Rama Yedavalli both from The Ohio State University.
On behalf of the 2015 DSCC Operating Committee and the Dynamic Systems and Control Division (DSCD) of ASME International, we cordially invite you to enjoy an exciting technical program and a unique opportunity to network in the eclectic urban hub of Columbus, Ohio.
Among regular, the conference will feature frontiers sessions, workshops, events for graduate students, best student paper competition, and a robotics/mechatronics challenge competition for undergraduate students. Invited session themes are expected to encompass energy systems, automotive engineering, human machine systems, analysis and control of vibration systems.

Paper Submissions are due April 3, 2015.
Details can be found at http://www.asmeconferences.org/DSCC2015/

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4.6. IEEE International Conference on Event-based Control, Communication, and Signal Processing

Contributed by: Sebastian Trimpe, strimpe@tuebingen.mpg.de

IEEE International Conference on Event-based Control, Communication, and Signal Processing
EBCCSP 2015

June 17-19, 2015
Krakow, Poland
www.ebccsp2015.org

Call for Work-in-Progress papers
The aim of the EBCCSP conference series is to provide a platform for the research communities that work in diverse application areas of the event-based paradigm to exchange new research results and ideas to explore synergies and foster scientific advancement.
Work-in-Progress papers describe research that has not yet produced the results required for regular papers, but due to the novelty and potential impact on the profession deserve to be shared with the community at an early research stage.
Main topic submission areas:

- Event-based control & communication
- Event-based signal processing
- Event-based computing
- Discrete event systems

Work-in-Progress papers are limited to 4 double column pages in a font no smaller than 10-points. Accepted WIP papers will be published in the conference proceedings and the IEEE eXplore data base.
For details of the submission of Work-in-progress papers see: http://home.agh.edu.pl/ ebccsp15/?page_id=43
Important dates for authors:
Deadline for submission of work-in-progress papers: April 10, 2015
Notification of acceptance of work-in-progress papers: April 30, 2015
Final papers due: May 15, 2015

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4.7. International Conference on Complex Systems Engineering

Contributed by: Ashwin Dani, ashwin.dani@engr.uconn.edu

The Systems Engineering at the University of Connecticut (UConn) is organizing a three-day International Conference on Complex Systems Engineering (ICCSE 2015) on November 9th to 11th 2015 at UConn's main campus in Storrs, CT, USA.

The conference is focused on Model-Based Systems Engineering (MBSE) of complex systems that are built from, and depend upon, the synergy of computational and physical components. These so-called Cyber-Physical Systems (CPS) incorporate mechanical components, electrical components, networked embedded systems, and information infrastructure, thus representing the convergence of computation, communications, control and intelligence. These systems are desired to have learning and predictive capabilities such that they can adapt to changing situations. The conference will feature talks by plenary speakers from industry and academia, panel discussions, technical paper sessions, student poster sessions and industry exhibits. The conference goals are aligned with a recently established, UTC Institute for Advanced Systems Engineering (UTC-IASE), in partnership with the United Technologies Corporation (UTC). The Institute serves as a hub for world-class research, project-based learning by globally-distributed teams of researchers, and industrial outreach activities.

The paper submission deadline is Friday, May 15th , 2015.

Further details pertaining to the 2015 ICCSE can be found at the conference website: http://iccse.uconn.edu

Krishna Pattipati
General Chair, ICCSE 2015
Interim Director, UTC Institute for Advanced Systems Engineering (UTC-IASE)
371 Fairfield Way, Unit 4157
Storrs, CT 06269-4157
Phone: 860-486-2890
Krishna@engr.uconn.edu http://www.utc-iase.uconn.edu/

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4.8. International Conference on Control, Automation and Systems

Contributed by: Jae Weon Choi, conference@icros.org

2015 15th International Conference on Control, Automation and Systems (ICCAS 2015)
October 13(TUE)-16(FRI), 2015
Bexco, Busan, Korea
http://2015.iccas.org

ICCAS 2015 will be held at Bexco, Busan Korea on October 13-16, 2015.

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.

It is our pleasure to announce that a number of high-profile plenary speakers have confirmed their participation and will give their lectures at the conference:

- Karl Johansson, KTH Royal Institute of Technology, Sweden
- Pheng Shi, University of Adelaide, Australia
- Jay Farrell, University of California, Riverside, USA

- Yoshihiko Nakamura, University of Tokyo, Japan
- Sangbae Kim, Massachusetts Institute of Technology, USA
- David Boas, Harvard Medical School, USA
- Taek Lyul Song, Hanyang University, Korea

Important Dates
April 10, 2015: Submission of organized session proposals
April 17, 2015: Submission of full papers
June 19, 2015: Notification of paper acceptance
July 17, 2015: Submission of final camera-ready papers

Organizing Chair: Myo Taeg Lim (Korea Univ., Korea)
Program Chair: Jae Weon Choi (Pusan Natl. Univ., Korea)

Busan, the venue, is famed as Northeast Asia's perfect mix of natural beauty and modern infrastructure. With 3.6 million residents, Busan is Korea's second largest city, and the world's 5th busiest port, making it the center of Korean global trade.

ICCAS 2015 CFP: http://icros.org/data/download/ICCAS2015/ICCAS2015_CFP.pdf

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4.9. IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning

Contributed by: Lucian Busoniu, lucian@busoniu.net

Call for Special Sessions and Papers
2015 IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning
http://adprl15.net

Adaptive dynamic programming (ADP) and reinforcement learning (RL) are two related paradigms for solving decision making problems where a performance index must be optimized over time. ADP and RL methods are enjoying a growing popularity and success in applications, fueled by their ability to deal with general and complex problems, including features such as uncertainty, stochastic effects, and nonlinearity.

The IEEE Symposium on ADPRL aims to provide an outlet and a forum for interaction between researchers and practitioners in ADP and RL, in which the clear parallels between the two fields are brought together and exploited. We equally welcome contributions from control theory, computer science, operations research, computational intelligence, neuroscience, as well as other novel perspectives on ADPRL. We host original papers on methods, analysis, applications, and overviews of ADPRL. We are interested in applications from engineering, artificial intelligence, economics, medicine, and other relevant fields.

We are currently seeking paper submissions as well as special sessions on topics relevant to the conference. Proposals for special sessions should include a title, a description of the session topics, the list of organizers, and a tentative list of contributions. Please submit your proposal to any of the ADPRL organizers. Proposals will be reviewed for quality and coherence with the conference topics, and the organizers will be notified of the decision.

Specific topics of interest include, but are not limited to:
Convergence and performance analysis; RL and ADP-based control; Function approximation and value function representation; Complexity issues in RL and ADP;Policy gradient and actor-critic methods; Direct policy search; Planning and receding-horizon methods; Monte-Carlo tree search and other Monte-Carlo methods; Adaptive feature discovery; Parsimonious function representation; Statistical learning and PAC

bounds for RL; Learning rules and architectures; Bandit techniques for exploration; Bayesian RL and exploration; Finite-sample analysis; Partially observable Markov decision processes; Neuroscience and biologically inspired control; ADP and RL for multiplayer games and multiagent systems; Distributed intelligent systems; Multi-objective optimization for ADPRL; Transfer learning; Applications of ADP and RL.

Important dates
Special session proposals: 1 May 2015
Paper submission: 14 June 2015
Notification to authors: 4 September 2015
Final papers due: 4 October 2015
Early registration: 4 October 2015
Conference: 7-10 December 2015

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4.10. IFAC Conference on Analysis and Design of Hybrid Systems

Contributed by: Magnus Egerstedt, magnus@gatech.edu

5th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS)
Atlanta, GA, USA, October 14-16 2015
http://adhs15.gatech.edu

Important Dates:
Papers Due: April 15, 2015
Author Notification: July 1, 2015
Final Papers Due: September 1, 2015
Conference: October 14-16, 2015

The IFAC Conference on Analysis and Design of Hybrid Systems brings together researchers and practitioners in the area of hybrid systems, with backgrounds in control, computer science, and operations research, to provide a forum for discussing and presenting recent results in the fields of hybrid and cyber-physical systems.

Submissions are invited in all areas pertaining to the design, analysis, control, optimization, implementation, and applications of hybrid dynamical systems. Topics of interest include, but are not limited to: modeling, specification, analysis, verification, controller synthesis, simulation, and implementation. Contributions on applications of hybrid methods in various fields, such as networked control systems, large-scale process industries, transportation systems, energy distribution networks, communication networks, safety systems, etc, are particularly encouraged.

General Chairs:
Magnus Egerstedt and Yorai Wardi

Program Chairs:
Bengt Lennartson and Paulo Tabuada

Plenary Speakers:
Jessy Grizzle, Pramod Khargonekar, and Christoforos Hadjicostis

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4.11. Aerospace Applications Conference

Contributed by: Kamran Turkoglu, kamran.turkoglu@sjsu.edu

Aerospace Applications Conference - AAC 2015
03-05 August, 2015, San Jose, CA, USA
http://www.aac-conf.org/

Call for papers:
Aerospace Applications Conference (AAC), AAC - 2015 is organized by San Jose State University in participation with NASA Ames Research Center and DLR - German Aerospace Center experts. The conference will take place in San Jose State University campus in San Jose, CA, USA on August 03-05, 2015.

AAC aims to bring high quality technical papers, sessions and presentations with specific applications on aerospace and emerging technologies to the heart of the Silicon Valley, San Jose, CA. The venue is located on the historic site of San Jose State University, which is established in 1857.

The technical program of AAC - 2015 will consist of plenary talk(s), technical sessions and oral presentations.

Submitted papers should describe original, unpublished work of the authors and contributions are invited from all areas of aerospace related technologies, including (but not limited to):
Structures and Material science with specific applications in Aerospace; Aerodynamics, Thermodynamics, Computational Fluid Dynamics and specific applications in Aerospace Systems; Guidance, Navigation and Control in Aerospace Systems; Sensor fusion and Big Data processing/applications in Aerospace Systems; Quantum computers and applications in Aerospace Systems; Robotic systems in space exploration; Space mission design and exploration; Avionic systems; Air Traffic Management (ATM); Rocket science and Interplanetary missions; Emerging technologies in commercial use of Aerospace technologies; Unmanned Aerial Systems (UAS/UAV) and technologies; Multi Disciplinary Optimization (MDO); Fault Detection and Algorithms; Federal Aviation regulations & related topics; Human factors and safety in Aerospace and Aviation technologies.

Plenary Speaker(s):

- Nhan Nguyen, NASA Ames Research Center
- Frank Preud'homme, QinetiQ Space nv, Belgium

Important dates:
Apr 20, 2015 : 1pg abstract / invited session(s) submission deadline
Apr 27, 2015 : Notification of abstract acceptance
Jun 15, 2015 : Manuscript submission deadline
Jul 06, 2015 : Notification of acceptance
Jul 24, 2015 : Final paper submission deadline
Aug 3-5, 2015 : AAC'15 Conference

Paper submission:
Original technical contributions are solicited for presentation at AAC 2015.

For more information please visit: http://www.aac-conf.org/

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5. Workshops

5.1. Workshop on Systems Biology

Contributed by: Michael Margaliot, michaelm@eng.tau.ac.il

A one day workshop on Systems Biology, organized by the Israeli Association for Automatic Control, will take place on June 1, 2015 at the Daniel Hotel, Herzliya, Israel. The main speaker will be Prof. Pablo A. Iglesias, the Edward J. Schaefer Professor of Electrical Engineering, Johns Hopkins University. For more information, please see http://iaac.technion.ac.il/events.html

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5.2. International Workshop on Numerical Software Verification

Contributed by: Sergiy Bogomolov, sergiy.bogomolov@ist.ac.at

Call for Participation NSV 2015
8th International Workshop on Numerical Software Verification
April 13, 2015
Cyber-Physical Week 2015
Seattle, WA, USA
Web Page: http://nsv2015.informatik.uni-freiburg.de/

Topics:
The scope of the workshop includes, but is not restricted to, the following topics
Quantitative and qualitative analysis of hybrid systems; Models and abstraction techniques; Optimal control of dynamical systems; Parameter identification for hybrid systems; Numerical optimization methods; Hybrid systems verification; Applications of hybrid systems to systems biology; Propagation of uncertainties, deterministic and probabilistic models; Specifications of correctness for numerical programs; Formal specification and verification of numerical programs; Quality of finite precision implementations; Numerical properties of control software; Validation for space, avionics, automotive and real-time applications; Validation for scientific computing programs

Registration: http://www.cpsweek.org/2015/reg.html (Regular registration rates until April 7, 2015)
See http://nsv2015.informatik.uni-freiburg.de/ for the program.

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5.3. International Workshop on Hybrid Systems Biology

Contributed by: Alessandro Abate, aabate@cs.ox.ac.uk

First Call for Papers
HSB 2015: The 4th International Workshop on Hybrid Systems Biology
http://hsb2015.fi.muni.cz
5 September 2015, Madrid (Spain)

The 4th International Workshop on 'Hybrid Systems Biology' will be held on September 4th and 5th in Madrid (ES), and co-located with the Madrid Meet 2015, which hosts also CONCUR 2015, QEST 2015, FORMATS 2015, among other events. Previous editions have been held in Newcastle upon Tyne (UK), Taormina (IT), and Vienna (AT, at VSL 2014).

Important dates:
Abstract Submission: June 8, 2015
Paper Submission: June 15, 2015
Notification: July 15, 2015

Topics of interest:
The scope of the HSB workshop covers the general area of dynamical models in Biology with an emphasis on

hybrid approaches - by no means restricted to a narrow class of mathematical models - and taking advantage of techniques developed separately in different areas.

Topics of interest include, but are not limited to:
Models of metabolic, signalling, and genetic regulatory networks in living cells; Models of tissues, organs, physiological models; Biological applications of quantitative and formal analysis techniques, such as reachability computation, model checking, abstract interpretation, bifurcation theory, stability, and sensitivity analysis; Parametric and non-parametric system identification techniques (learning models from experimental data); Efficient techniques for combined and heterogeneous (stochastic/deterministic, spatial/non-spatial) simulations for biological models; Modelling languages for biological systems, with related analysis and simulation tools; Models coping with incomplete and uncertain information; Stochastic hybrid models in biology; Hierarchical systems for multi-scale, multi-domain analysis; Abstraction, approximation, discretisation, and model reduction techniques; Game-theoretical frameworks in biology (e.g., populations dynamics); Control architectures of biological systems; Modelling and synthesis for synthetic biology.

Call for Contributions: We solicit high-quality submissions, to be refereed by the Program Committee below, and to be published as Lecture Notes in Computer Science (LNCS) with Springer Verlag. Selected articles might be invited for a special issue in a high-quality journal (under negotiation).
Submitted papers will describe original work that has not been previously published and is not under review for publication elsewhere. We accept the following two types of submissions:

* full papers (max 15 pages LNCS Springer Verlag style)
* short papers, including work in progress and tool papers (max 6 pages LNCS Springer Verlag style)

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6. Graduate Schools

6.1. DISC PhD School on Control for Cyber-Physical Systems

Contributed by: Maurice Heemels, m.heemels@tue.nl

DISC PhD School on Control for Cyber-Physical Systems
Zandvoort (near Amsterdam at the beach), The Netherlands, June 1-4, 2015

Maurice Heemels and Alberto Bemporad have the pleasure to invite you to participate in the DISC PhD School on "Control for Cyber-Physical Systems", which is scheduled to take place from June 1-4, 2015, at "Centerparcs park Zandvoort", Zandvoort, 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.

Venue:
The school will be held in Centerparcs park Zandvoort, which is a beach resort right at the beach of the North Sea, see http://www.centerparcs.com/gb-en/netherlands/fp_ZV_holiday-park-park-zandvoort
Zandvoort is a nice and vibrant beach town, very close to Amsterdam.

Cyber-Physical Systems:
The design of next generation smart electricity grids, intelligent transportation, electron microscopy and high-end printing requires a tight coordination between computation, communication and control elements (the cyber part) on the one hand, and physical processes such as heating, cooling, motion, vibrations, etc. (the physical part) on the other hand. Despite the need for integrated design of these so-called cyber-physical systems (CPS), the corresponding scientific disciplines (control, computer science, etc.) have predominantly

developed independently. Novel system architectures and systematic design methods are needed to realize the integrated design of the CPS of the future.

Particular attention will be given to:

. Control over communication networks
. Security of CPS
. Resource-aware control
. Formal methods in control of CPS
. Hybrid systems
. Multi-agent systems
. Distributed and decentralized control and MPC, and important applications

Lecturers:
Keynote lectures will be given by:
Prof. Girish Nair, University of Melbourne, Australia; Prof. Ricardo Sanfelice, University of California, Santa Cruz, USA; Prof. Paulo Tabuada , University of California, Los Angeles, USA; Prof. Alberto Bemporad , IMT Lucca, Italy; Prof. Sebastian Engell, University of Dortmund, Germany; Prof. Kim Larsen, Aalborg University, Denmark; Prof. Kanat Camlibel, University of Groningen, NL; Prof. Ming Cao, University of Grongingen, NL; Prof. Bart De Schutter, Delft University of Technology, NL; Prof. Maurice Heemels, Eindhoven University of Technology, NL.

Registration:
The registration fee, which includes full boarding and lodging, is 1000 Euro for non-DISC members (before April 15 - early bird) and 1150 Euro (after April 15) for DISC students/members 800 Euro (before April 15 - early bird) and 950 Euro (after April 15)

You stay in a comfort cottage with three people. You have your own bedroom. Sheet package, towel package, kitchen package and swimming pool access are included. For cottage details check the website. The school is limited to 55 participants based on a first-come first-serve policy. The registration deadline is May 15, 2015 (Early bird deadline April 15).

You can register at the following website: https://disc-forum.nl. Non-DISC members can also sent an email to: secr@disc.tudelft.nl for registration. (Please mention your full name and university including address).
For further information, see http://www.disc.tudelft.nl/education/summer-school-2015.html
or http://disc-cps15.imtlucca.it/venue.html or contact the DISC administrative office:
Martha Otte (m.w.otte@tudelft.nl) or the organizers: Maurice Heemels (m.heemels@tue.nl) and Alberto Bemporad (alberto.bemporad@imtlucca.it)

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7. Positions

7.1. PhD: North Carolina A&T State University, USA

Contributed by: Ali Karimoddini, akarimod@ncat.edu

Three PhD positions are available in the area of Control and Robotics in Autonomous Cooperative Control of Emergent Systems of System (ACCESS) Laboratory at Autonomous Control and Information Technology (ACIT) Center, North Carolina A&T State University. The project will involve highly cross-disciplinary research in different aspects of autonomous systems. The research topics will include but not be limited

to Modelling and analysis of multi-agent systems; Teaming and cooperative control of multi-agent systems; Testing, evaluation, and verification of multi-agent systems; Motion planning and coordination of multi-agent systems.

Minimum Qualifications:

. Meet the minimum admissions requirement for the ECE Department at NCA&T State University
. Recent B.S. in Electrical & Computer Engineering
. Demonstrated experience in control and robotics
. Programming in MATLAB and C/C++

Desired Qualifications:

. Recent M.S. in Electrical & Computer Engineering or related fields
. Strong analytical skills
. Strong mathematical background in: linear algebra, probability and stochastic processes, system and control, estimation, and optimization
. Experience in embedded real-time systems
. Programming skills for embedded devices and Microcontrollers
. U.S. citizenship or permanent residency. Minority candidates are strongly encouraged to apply.

If you are interested, please send an email to Dr. Karimoddini at akarimod@ncat.edu with the subject "PhD Application", and include:

1. A cover letter that explains why the proposed research topic interests you, how you fulfill the requirements of this project, and list any relevant undergraduate and MS courses or projects.
2. Your curriculum vitae and details of your publications (if any).
3. Two contact referees (including name, e-mail, and phone number of the person)
4. Your Bachelor and Master Transcripts if applicable.
5. One page summary of your MSc thesis if applicable.
6. Electronic copies of your publications if any.
7. Other information that might be relevant to your application.

Only shortlisted candidates will be contacted.

Contact:
Dr. Ali Karimoddini
Autonomous Cooperative Control of Emergent Systems of System (ACCESS) Laboratory
Autonomous Control and Information Technology (ACIT) Center
North Carolina A&T State University
E-mail: akarimod@ncat.edu

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7.2. PhD: University of Oxford, UK

Contributed by: Alessandro Abate, aabate@cs.ox.ac.uk

One PhD position is available in the areas of Control Engineering and Formal Verification, on a project titled "Formal Study of Large Populations of Photo-Voltaic Panels", to be conducted at the Department of Computer Science at the University of Oxford, under the supervision of Prof. A. Abate.

Description: Transmission System Operators have to ensure the physical balancing of the power grid (the total electricity generation must match the total electricity consumption). In AC electrical grids, the frequency (50Hz in nominal conditions) indicates whether or not the system is balanced. More and more Photo-Voltaic (PV)
Panels are installed in distribution grids and they are not controllable by the TSO. In order to assess the security and robustness of the whole system, TSO need to take PV Panels behaviors into account. The project benefits from the contribution of an industrial partner: the aim of the PhD project is to formalize and implement a formal study of large populations of PV Panels.
Technically, the student is expected to work at the interface of advanced modelling science from control engineering and of computational results from formal verification.

Applications are solicited at the moment, with an expected starting date in September 2015. Please send:

- CV;
- Statement of interests;
- Full transcripts, and additional documents such as published articles;
- Names and contact of references.

The funding for the PhD position is restricted to applicants that are EU nationals. Contact: Prof. A. Abate, Department of CS, University of Oxford

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7.3. PhD: Maynooth University, Ireland

Contributed by: John Ringwood, john.ringwood@eeng.nuim.ie

The Centre for Ocean Energy Research (COER) at Maynooth University, Ireland has a further opportunity for well-qualified applicants interested in undertaking a research degree at PhD level. The PhD position is in the area of estimation and forecasting for wave energy applications and comes with a stipend of Euro18k + fees.
A variety of control algorithms have been developed for wave energy devices (WEDs), which provide optimal load force signals for a WED, given current and future knowledge of the excitation force on the device. However, the wave excitation force cannot be measured directly and future knowledge of the excitation force is required for the majority of WED controllers, which are non-causal.
This project will directly address the problem of excitation force estimation and prediction, by developing estimation and prediction algorithms suitable for both linear and nonlinear WED models, and linear and nonlinear wave descriptions.
The successful candidate will join a Science Foundation Ireland project entitled "Development of the next generation of controllers for wave energy devices", which has a total team count of 7 dedicated researchers, covering hydrodynamic modelling, system identification and control design, in addition to the topic of this PhD project.
That project exists within a wider COER group of 16 researchers.
Candidates should be well-qualified academically to bachelors (preferably H1) or masters level. The project will require a mix of skills, including mathematical, modelling, programming and simulation skills, as well as the development of state estimation and forecasting algorithms. Applicants with backgrounds in mechanical, mechatronics and electrical/electronic engineering, applied mathematics or control systems are especially suitable, though other areas such as fluid mechanics, hydrodynamics, etc may also be considered. Candidates must have excellent written and oral communication skills and programming ability.

Further information on COER is available at: http://www.eeng.nuim.ie/coer/
For further information, contact Prof. John Ringwood
john.ringwood@eeng.nuim.ie
Tel: +353 1 708 4766

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7.4. PhD: Università degli Studi del Sannio, Italy

Contributed by: Carmen Del Vecchio, c.delvecchio@unisannio.it

PhD in molecular biology at the Università degli Studi del Sannio

We are looking for smart, enthusiastic, possibly well trained young students in the field of control engineering willing to use their expertise, their intuition, their brilliance, their enthusiasm in the field of control in molecular biology. This is a quite recent area for researchers in control but their contribution has already proved to be worthy [1]. To have a deeper understanding of the specific theme of the P.h.D research see [2]. You, the ideal candidate, have a solid background in control engineering and an excellent record in your academic studies (master and bachelors); a sound knowledge of biological systems is a plus.
We offer a three year PhD scholarship at the Università degli Studi del Sannio, Benevento, Italy, in collaboration with the Institute of Protein Biochemistery, a branch of the National Research Council (CNR), in Naples. You will attend your PhD course in a friendly and stimulating environment and have the opportunity to spend some time in the pleasant town of Benevento, the vibrant city of Naples and their beautiful surroundings in Campania Region.
Referent: Prof. Luigi Glielmo (email glielmo@unisannio.it)
Prof. Carmen Del Vecchio (email c.delvecchio@unisannio.it)

References

[1] Sontag ED "Some new directions in control theory inspired by systems biology" SystBiol (Stevenage) 2004, 1:9-18.
[2] Luini A., Mavelli G., Jung J. , Cancino J., "Control systems and coordination protocols of the secretory pathway", F1000 Prime Reports, October 2014

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7.5. PhD: Northumbria University, UK

Contributed by: Xuewu Dai, xuewu.dai@northumbria.ac.uk

Fully funded PhD scholarships in Control and Communication Engineering

A PhD position is available, starting from October 2015 to work on "Secure Precision Time Synchronisation in Heterogeneous Networked Control Systems" http://www.findaphd.com/search/ProjectDetails.aspx?PJID=61972
We are seeking high calibre graduates in a range of engineering disciplines to undertake this challenging PhD study that will perform research into these interdisciplinary areas.

1. Investigate time synchronization protocols (e.g. IEEE 1588, RBS, TPSN, FTSP, etc) in heterogeneous communication networks (e.g. Fiber-Wireless networks) and NCSs;
2. Investigate the cyber-attack scenarios and its impacts on Time Synchronization and NCSs;
3. Develop a secure precision time synchronization protocol and construct mitigation strategies to prevent the attacks from taking place or maintain the NCS's performance by taking into account the malicious attack.

How to apply
Formal applications can be completed online.
More details can be found at https://www.northumbria.ac.uk/research/postgraduate-research-degrees/how-to-apply/ It is recommended to email Dr. Xuewu (Daniel) Dai (xuewu.dai@northumbria.ac.uk), enclosing your CV and describing your previous studies, research experiences

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7.6. PhD: INRIA, France

Contributed by: Alain Sarlette, alain.sarlette@inria.fr

PhD position: INRIA Paris

We advertise a PhD position in quantum control and quantum engineering, which focuses on theoretical developments in close collaboration with experimentalists in our QUANTIC team. It is planned to implement the proposed control and engineering principles in circuitQED experiments and thereby build state-of-the-art quantum technology.
The position is part of a competitive campaign, in which the most promising (candidate,project)-pairs will be selected INRIA-wide.
The application deadline is 30/04/2015.
More information can be obtained on the website: here

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7.7. PhD: University of New South Wales, Australia

Contributed by: Daoyi Dong, d.dong@unsw.edu.au

PhD scholarship at UNSW
Project title: Robust control of quantum ensembles

Supervisors: Dr Daoyi Dong and Prof Ian Petersen
https://research.unsw.edu.au/people/mr-daoyi-dong
http://seit.unsw.adfa.edu.au/staff/sites/petersen/P1.html

Quantum ensembles have wide applications in emerging quantum technology including quantum computation, long-distance quantum communication, and magnetic resonance imaging. The thesis project aims to develop new theories and control algorithms to enhance control capabilities and robustness in the engineering of quantum ensembles.
The project also involves possible collaboration with Professor Herschel Rabitz's group at Princeton University.
The successful applicant, subject to admission to the PhD degree program, will be awarded a UNSW Canberra Research Training Scholarship with an annual tax-free stipend of $26,392 (2014 rate). This scholarship is for a period of 3 years, subject to satisfactory progress reviews. The successful applicant would be expected to be available to commence their studies no later than Session 2, 2015 and must be on campus and enrolled at UNSW Canberra in the relevant PhD program by August 2015.
Potential students with strong background of mathematics, quantum physics or control theory are encouraged to apply for this scholarship. Prospective students should contact Daoyi Dong (daoyidong@gmail.com) with their academic transcript, a CV and English test scores (if necessary). Applications will be accepted until the position is filled.
UNSW Australia (the University of New South Wales) is one of Australia's leading research and teaching universities and a founding member of the prestigious Group of Eight (Go8) research-intensive universities in

Australia and a member of the Universities 21 international consortium. UNSW Australia is an Australian university with a global vision to bring our students a truly world-class learning experience; we regularly collaborate with pioneering universities around the world. The Canberra campus of UNSW Australia is located at the Australian Defence Force Academy (ADFA).

For further information, please contact:
Dr Daoyi Dong
Email: d.dong@unsw.edu.au or daoyidong@gmail.com
Phone: +61 2 6268 6285
School of Engineering and Information Technology
UNSW Australia, Canberra ACT 2600 Australia

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7.8. PhD: University of Cambridge, UK

Contributed by: Malcolm C. Smith, mcs@eng.cam.ac.uk

PhD: The MathWorks Studentship in Engineering

Funding is available to support a PhD studentship in Control Systems in the Department of Engineering, University of Cambridge, generously provided by MathWorks (the developers of MATLAB® and Simulink® engineering software).

The studentship is tenable for 3 years from 1 October 2015 and includes: the cost of College and University fees at home/EU rate and a maintenance grant at the EPSRC recommended standard rate and paid internships for up to 10 weeks each year at MathWorks Cambridge offices by arrangement.
Research in any area of systems of control will be considered. Applications should be submitted by 31 May 2105. Further details and applications procedure can be found at: http://www.jobs.cam.ac.uk/job/6400/

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7.9. PhD: Lorraine University, France

Contributed by: Simona Dobre, Simona.Dobre@isl.eu

PhD thesis proposal
Title: Linear Parameter Varying (LPV) model identification for aerodynamic coefficient estimation from free flight vehicle
Profile: Master internship

- Good background in signals and systems, control systems and MATLAB
- Knowledge in aerodynamics and flight mechanics is not necessary, but is appreciated

The Research Center in Automatic Control (CRAN) at University of Lorraine and the French-German Research Institute of Saint-Louis (ISL) announce a vacancy for a three year PhD position to be started in October 2015.

Project description:
The use of aerodynamic coefficients for the characterization of the behavior of an object in flight remains one of the oldest and most emergent research project in the field of exterior ballistic. Currently, there exist several methods able to quantify the aerodynamic coefficients of vehicles like munitions, re-entry space vehicles, Unmanned Aerial Vehicles, missiles. In that respect, basic information is generally gathered through Computational Fluid Dynamics (CFD) analyses, empirical or semi-empirical tools and wind-tunnel test.

This information is further improved through the use of free flight test and system identification procedures. System identification of a vehicle in free flight can be defined as the determination of a model structure and the estimation of the unknown parameters contained in the chosen model structure. As herein the model structure is assumed known, the system identification problem is then reduced to a parameter identification procedure. Indeed, the state equations are constructed by taking into account Newton's second law of motion in translational and rotational forms, while the output equations correspond to embedded sensor measurements. It is a continuous-time nonlinear state space model expressed in a rolling body frame and composed of 12 state variables and seven output signals. The parameters of the model are thus represented by the unknown aerodynamic coefficients, which can be further represented as a function of the Mach number and the total angle of attack.
The objective of the proposed PhD work is to improve the accuracy of the aerodynamic coefficients estimates based on onboard and on-ground measurements: radar data, magnetometer and accelerometer measurements, 3D high speed cameras. Several strategies could be considered: polynomial or multivariate spline descriptions of the aerodynamic coefficients, multiple fit of several data series and construction of a Linear Parameter-Varying (LPV) model derived from the nonlinear dynamics.
The candidate will integrate ISL Division II (Flight Techniques for Projectiles) ABX (Aerodynamics and eXterior Ballistics) research group and CID (Control Identification Diagnostic) department at the Research Center in Automatic Control, Lorraine University. The PhD subject is funded by ISL, about 2500 Euros/month.
Contact: Dr. Claude BERNER, Dr. Simona DOBRE et Dr. Spilios Theodoulis
ISL - Aerodynamics and eXterior Ballistics
Claude.Berner@isl.eu; Simona.Dobre@isl.eu; Spilios.Theodoulis@isl.eu
tel : +33 (0)3 89 69 50 53, +33 (0)3 89 69 53 48, +33 (0)3 89 69 50 54
Pr. Marion GILSON, Dr. Floriane Collin
CRAN - Research Center in Automatic Control, Lorraine University
Marion.Gilson@univ-lorraine.fr

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7.10. PhD and Post Doc Positions: Leuphana University of Lueneburg, Germany

Contributed by: Paolo Mercorelli, mercorelli@uni.leuphana.de

The Institute of Product and Process Innovation (PPI) http://www.leuphana.de/institute/ppi/personen.html of Leuphana University of Lueneburg is available to host through the Minerva Fellowship Program PhD Positions and Post Docs in the field of Control Systems, System Theory, Signal Processing. The Minerva Fellowship Program enables German and Israeli scientists and researchers to spend longer-term research residencies at institutions in the host country from six to thirty-six months (for graduates) or from six to twenty-four months (for post docs). To date, more than 1,500 German and Israeli scientists and researchers have been awarded a Minerva Fellowship. Some fifty scientists receive fellowships each year. Young scientists and researchers (post docs) are given priority in the selection process. Scientists with tenure are not eligible to apply.

For more information about the program: http://www.minerva.mpg.de/fellowships/fellowships.html
The PPI is a small department and offers a highly engaged and motivated personal and futuristic projects in the field of Smart Greed Control, Atomic Force Microscopy Control, Automotive Control, Biomedical Control and Robotics.
For the preselection of the candidates to be hosted in PPI please send your resume and your research proposal

which should not exceed five pages. (References are not included in these five pages.) per e-mail to Paolo Mercorelli (mercorelli@uni.leuphana.de)

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7.11. PhD and Post-Doc Positions: University of Bristol, UK

Contributed by: Andres Marcos, andres.marcos@bristol.ac.uk

A PhD and a Post-Doctoral position are available at the Aerospace Engineering Department of the University of Bristol (U.K.) to work on aircraft flexible wing flutter analysis.

The two positions are part of a new European Horizon 2020 Transport project entitled: "Flutter Free FLight Envelope eXpansion for ecOnomical Performance improvement (FLEXOP)" that will start in June 2015. The consortium is composed by 4 industrial teams, 2 research centers and 3 universities. The objective of FLEXOP is to exploit the coupling between aeroelasticity, flutter and active controls to develop an integrated design approach of wing aeroelastic tailoring and flight control, enabling significant performance increase of future derivative aircraft. Towards this goal an unmanned demonstrator aircraft (MTOW<150 kg) will be designed and several versions built each with the same wing shape but different flexible characteristics so as to provide an incremental and safe flight testing of the developed flutter techniques.

The PhD position will focus on the investigation of bifurcation and robust analysis methods for analysis of aircraft flutter. The aim is to provide an answer to the analysis of flutter in aircraft flexible wings in terms of its onset, effects and critical parameters by means of linear (i.e. structured singular value) and nonlinear (i.e. bifurcation) analysis techniques. You will be in charge of developing the required robust analysis models, of studying and applying each of the analysis methods, and then investigating possible synergies to exploit their respective advantages. You will be co-advised by Dr Marcos and Prof. Lowenberg. Applicants should have a good engineering, or related, degree preferably at Master's level. Knowledge of robust control and/or nonlinear analysis techniques is preferred. The position is for 3.5 years starting with a stipend (tax free) per annum of £13,863. The position is only open to EU citizens and residents.

The Post-Doctoral position will focus on the investigation of robust control methods for on-board estimation and analysis of flutter. It will include the development, implementation and verification of the designs, as well as supporting their hardware implementation and flight demonstration in FLEXOP flexible wing demonstrator. The work will be under the supervision of Dr. Marcos and it requires a PhD in automatic control, signal processing or other relevant field of work. Advanced knowledge of robust control techniques and their practical application is preferred. The position is offered on a fixed term contract for two year with a starting salary per annum of £31,342 - £35,256 depending on qualifications. The position is open to all nationalities.

The starting date for both positions is June 2015 or as soon thereafter. Interviews are expected to be carried out from late April and until position is filled.

Enquiries can be made to Dr. Andrés Marcos: andres.marcos@bristol.ac.uk. Please add to the email subject: FLEXOP PhD position or FLEXOP PostDoc position.

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7.12. Post-Doc: Tallinn University of Technology, Estonia

Contributed by: Juri Belikov, jbelikov@cc.ioc.ee

Control Systems Research Laboratory (http://www.a-lab.ee/) is a part of the Faculty of Information Technology of Tallinn University of Technology (http://www.ttu.ee).

Our focus lay in the area of advanced system modeling and control design methods.
We invite applications for one post-doctoral position in application of intelligent control methods. The main objective of this research is to develop an industrial software framework for control engineers. It will serve as an assisting environment that is supposed to significantly simplify implementation of advanced control techniques in the industry.
The project will be focused on the combination of classical control techniques with intelligent control methods and its application to control of complex nonlinear systems. The proposed research aims to:

- Determine the most suitable (with respect to predefined control criteria) control strategy for particular industrial system by means of (i) experimental data analysis, (ii) analytical and numerical modeling, and (iii) computer based simulation/verification;
- Software implementation of the chosen intelligent control algorithm;
- Validate the developed framework on the basis of laboratory prototypes of real industrial plants;
- Incorporate the developed algorithms into practical applications.

Required qualification:

- PhD in control systems engineering or relevant field;
- Previous experience in control of industrial processes;
- Knowledge of MATLAB/Simulink;
- Knowledge of C/C++ and/or Java programming languages;
- Familiarity with computational intelligence based methods;
- Good communication skills in oral and written English.

We offer:

- The appointment will be for a period of 1 year with a possibility to extend for the second year;
- As an employee of the university, you will receive a competitive salary approximately 2600 EUR Gross Salary (2000 EUR Net Salary) per month;
- Access to a variety of research equipment available in our laboratory.

The application should consist of:

- A motivation letter stating why the proposed research topic interests you;
- A complete CV with a full publication list;
- Contact details of at least two reference persons.

These documents must be compiled into a single pdf file and sent to a-lab@ttu.ee with a subject "Post-Doc application of <Name ><Surname >".
The deadline of the application is April 15, 2015.
Expected start of the project is September 2015.

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7.13. Post-Doc: Technion Israel Institute of Technology, Israel

Contributed by: Leonid Mirkin, mirkin@technion.ac.il

Applications are invited for a post-doctoral research position in the area of control of distributed energy resource networks at the Faculties of Electrical and Mechanical Engineering, Technion - IIT, Israel. The

position is for a period of 1 year, with the possibility of renewal to another year contingent on performance and availability of funding. Applicants are required to have a recently completed PhD in control or related area of engineering or applied mathematics.
Applications (a motivation letter + CV with a list of publications) and enquiries should be addressed to Leonid Mirkin (mirkin@technion.ac.il).

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7.14. Post-Doc: Delft University of Technology, The Netherlands

Contributed by: Tamas Keviczky, t.keviczky@tudelft.nl

A Postdoctoral position is available at the Delft Center for Systems and Control (DCSC), Delft University of Technology, The Netherlands, with the following focus: Cooperative Control of Offshore Wind Farm Distribution Grids
Project description:
The project will focus on power and voltage control in offshore wind farms to ensure stability and robustness with respect to fluctuations in the wind field, and to enforce maximum power limits. Motivated by typical challenging scenarios defined by our industrial partner, we will focus on a decentralized or distributed cooperative control setting, where local controllers are designed for each subsystem and may have the ability to communicate with each other. The candidate will identify applicable methodologies from the areas of robust control for interconnected systems, distributed model predictive control, and distributed optimization. The control mechanisms that are found to be the most suitable/promising based on a preliminary study will be elaborated and implemented in a simulation environment (e.g., RTDS) for further analysis. In addition to developing and testing research methodology and algorithms, the successful applicant will be involved in the interaction with representatives of our industrial partner, with frequent visits to their offices in The Netherlands and Germany.

Candidate:
Applicants for this challenging project should have a PhD degree and background in systems and control or electrical engineering. The applicant should have demonstrated ability to conduct high-quality research according to international standards, as demonstrated by publications in international journals.
Familiarity or previous experience with the following topics is a plus: smart grids, power networks, power inverter control, decentralized and distributed control. In addition, excellent communication skills are important for this position and a good command of the English language is required.

Project term:
Employment and salary are according to the Collective Employment Agreement of Dutch Universities, with excellent secondary benefits and an annually increasing salary starting at approximately EUR 3000 gross per month or higher depending on the candidate's experience. The initial appointment will be for one year with a possibility for extension depending on performance. The position will be filled as soon as a suitable candidate is found (aiming to start early summer of 2015). The project will be supervised by dr. Tamás Keviczky.
Information and application:
Interested applicants should send their detailed Curriculum Vitae, the names of two professional referees, a list of courses taken with grades obtained, a list of publications (with a copy of three selected ones), a summary of their PhD thesis and a cover letter stating their motivation, preferably by e-mail.

Additional information about the vacancy can be obtained from dr. Tamás Keviczky (t.keviczky@tudelft.nl) and the following web-site: http://www.dcsc.tudelft.nl/

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7.15. Post-Doc: Lund University, Sweden

Contributed by: Anders Rantzer, rantzer@control.lth.se

Applications are invited for positions as postdoc at the LCCC Linnaeus center, Lund University, Sweden. See http://www.lccc.lth.se.

LCCC - Lund Center for Control of Complex engineering systems has been created with support from a ten year Linnaeus grant by the Swedish Research Council, a special grant allocated to research environments of highest international quality. The LCCC postdoc positions enable excellent young individuals to develop their own line of research in synergy with a strong environment.

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7.16. Post-Doc: University of Newcastle, Australia

Contributed by: Kaushik Mahata, Kaushik.Mahata@newcastle.edu.au

The School of Electrical Engineering and Computer Science at the University of Newcastle, Australia invites applications for a postdoctoral position in the area of System Identification. Applicants should have a Ph.D in a relevant area, and proven publication record in leading international journals.

The position is available for a year, with a possibility to extend for another year, depending on the candidate's performance.

The applications should be sent to Kaushik Mahata (Kaushik.Mahata@newcastle.edu.au).

It should contain a CV, a description of past research achievements and current research interests, and 3 references.

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7.17. Post-Doc: Nanyang Technological University, Singapore

Contributed by: BH Soong, ebhsoong@ntu.edu.sg

One open post-doc position in fault tolerant wireless sensor networks for electrical machine.

The post-doctoral (Research Fellow) will assist the Principal Investigator:

- To develop models for design of networking algorithms to enhance fault tolerant capabilities of the sensor networks deployed on electrical machine platform.
- To develop methodology for reliability of the sensor networks applied to electrical machine platform, with an optimal allocation of number of sensors, and networking algorithm that improves the fault tolerant capabilities of electrical drives and mechanical drives at minimum cost.
- To implement the algorithms in simulation and verify the performance in hardware test.

Requirements:

Prospective candidates should hold a Ph.D. degree in electrical engineering, computer science, mechatronics, applied mathematics, or other related disciplines.

Moreover, he/she should have a strong publication record in the fields related to wireless sensor and actuator networks and have evidence of hands on deployment of wireless sensors. The candidate should also have excellent verbal and writing skills in English.

The contract is for one year and could be extended subject to the research performance. The candidate will work in the Rolls Royce Centre in NTU. The salaries are competitive and are determined according to the

successful applicant's accomplishments, experience and qualifications. Singapore has low income tax and a postdoc is likely to pay a variable income tax of a maximum of 15%.

Application Procedure:
How to apply for the Postdoc position:
The application should consist of

. A motivation letter (explaining the reason that you are interested in joining this project and NTU),
. A CV with a full publication list,
. The contact details of three referees.

Interested candidates should send these documents, as a single pdf file, e.g. Surname-RR@NTU.pdf to
A/Prof Soong Boon Hee
School of Electrical & Electronic Engineering
Nanyang Technological University
50 Nanyang Avenue
Block S2
Singapore 639798
E-mailed Applications: ebhsoong@ntu.edu.sg
Electronic submission of application is highly encouraged.
Only shortlisted candidates will be notified for interview.
Deadline and starting date: The deadline for the applications is 30th April 2015. We regret that only shortlisted candidates will be notified.
Established in 1981, the School of Electrical and Electronic Engineering (EEE) is one of the founding Schools of the Nanyang Technological University. Built on a culture of excellence, the School is renowned for its high academic standards and strong tradition in research. To support teaching and cutting-edge research, EEE is host to 11 research centres and more than 50 laboratories, which are well-equipped with modern facilities and state-of-the-art equipment. With about 200 faculty members and an enrolment of more than 4,000, of which about 1,300 are graduate students, it is one of the largest EEE schools in the world.

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7.18. Post-Doc: Nanyang Technological University, Singapore

Contributed by: Changyun Wen, ecywen@ntu.edu.sg

Research Project: Condition-based Control Strategies for Power Management System of More Electric Aircraft

Job Description & Specifications:
A global leader in power and energy research, NTU, in collaboration with the Rolls-Royce group is seeking a suitably qualified candidate to work in the area of power management system for More Electric Aircraft (MEA). Particularly, this part of the project involves the following tasks: (1) develop and implement the condition-based control strategies on the system level for the selected aircraft power system architecture; (2) evaluate the effectiveness of the developed condition-based control strategies for the aircraft power system for selected fault and failures scenarios; (3) analyse their impacts on the operation and system requirement of the generating source.

Job Requirements:
A PhD degree in control systems and/or power systems;
Demonstrated technical knowledge and capabilities (in the form of publication records) pertaining to power

management and control systems;
Knowledge and experiences in developing in condition-based control strategies, such as detection, prognosis & diagnosis of faults and design of controllers working under various operational conditions including normal or faulty/failure modes, are preferred;
Expertise in airborne power systems and good understanding of power conversion will be of advantage.

Application process:
Please send your CV and research statement to Professor Changyun Wen through email ecywen@ntu.edu.sg.

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7.19. Faculty: Harbin Institute of Technology, Shenzhen Graduate School, China

Contributed by: Ms. Zhao, scc.hitsz@gmail.com

Faculty Positions in Systems and Control
Organization/Institution: Harbin Institute of Technology, Shenzhen Graduate School, Shenzhen, China
Department: School of Mechanical Engineering and Automation

The Division of Control and Mechatronics Engineering at Harbin Institute of Technology, Shenzhen Graduate School (HITSGS) invites applications for several faculty positions at all ranks. We are seeking candidates with excellent credentials in the areas of systems and control, wind energy, power systems and smart grids. Applicants must have a Ph.D. or equivalent in electrical, mechanical and power systems engineering and need to show strong research record and potential. Successful candidates will be received a joint appointment in the Center of Systems and Control. The Division currently has 11 full-time faculty members, and is expected to grow to 20 faculties in the next few years.
HITSZ offers a competitive salary and the salary levels at HITSG for these positions are substantially higher than those provided by most universities in China, with full professor in the range of RMB 170K to 230K per year, associate professor in the range of RMB130K to 160K per year, and assistant professor in the range of RMB 90K to 110K per year. Bonus is a plus for all levels, subject to faculty's performance.
Interested candidates can send detailed CV, list of publications, statement of research (no more than 3 pages), teaching interests (no more than 2 pages), and a cover letter including contact information of three references to:

Ms. Zhao School of Mechanical Engineering and Automation
HIT Campus Shenzhen University Town
Xili, Shenzhen
Guangdong
P. R. China 518055
or email the documents to scc.hitsz@gmail.com

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7.20. Faculty: Norwegian University of Science and Technology, Norway

Contributed by: Lars Norum, norum@ntnu.no

Professor/Associate professor in Power Electronics
The Faculty of Information Technology, Mathematics and Electrical Engineering, http://www.ntnu.edu/ime at the Norwegian University of Science and Technology (NTNU)invites applications for a full-time professorship/associate professorship in Power Electronics affiliated with the Department of Electric Power Engineering http://www.ntnu.edu/elkraft.
Field of research and teaching for the professorship/associate professorship:

The professor/associate professor is expected to play a leading role in research and education within the field of analysis and application of power electronic converters with conventional and wide band-gap power semiconductors. The candidate should be a specialist in design of topologies for power electronics systems. The professorship/associate professorship shall cover the specific needs of industry, with application areas such as renewable energy, smart grid, and developments in the maritime and petroleum sectors.
Further details about the position can be obtained from:
http://www.jobbnorge.no/en/available-jobs/job/111265/professor-associate-professor-in-power-electronics
Applications are to be submitted electronically through (jobbnorge.no). Reference no: IME-020-2015.
Application deadline: 2015-04-20.

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7.21. Faculty: Norwegian University of Science and Technology, Norway

Contributed by: Morten Breivik, morten.breivik@ntnu.no

The Norwegian University of Science and Technology (NTNU) is establishing the Onsager Fellowship programme, which is designed to attract the most talented young scholars with an established reputation for high-quality research and a commitment to teaching at university level, see http://www.ntnu.edu/onsagerfellowship
As part of the Onsager fellowship programme, NTNU's Faculty of Information Technology, Mathematics and Electrical Engineering invites applications for a tenure-track associate professorship in Robotic Vision, affiliated with the Department of Engineering Cybernetics (Institutt for teknisk kybernetikk, ITK, https://www.itk.ntnu.no/english.

ITK has 10 full professors, 6 associate professors and 1 assistant professor. In addition, there are 11 adjunct professors, about 10 postdoctoral fellows and 60 PhD candidates. Approximately 90 MSc candidates graduate annually. The department is involved in numerous research projects and centers, including a new Centre of Excellence for Autonomous Marine Operations and Systems (AMOS, http://www.ntnu.edu/amos) at NTNU.
Machine vision has been a popular research field for decades, reaching maturity for tasks such as identification and handling of static rigid objects. To handle more ambiguous and versatile tasks, machine vision must be integrated deeper into the architecture for sensor fusion and robotic control, enabling information processing to use mathematical models of the robotic system, and enabling the control system to extract relevant information from imaging sensors in real time. We call this field for robotic vision.
The advertised tenure-track position is at the level of associate professor, and applicants are expected to have documented world-leading research capability or potential in robotic vision. It is expected that the successful applicant will qualify for a full professorship after the tenure-track period of 6-7 years.
The candidate must have a background in both machine vision and control systems. Ideally, the candidate should have a PhD involving both topics, and a strong track record of publishing in reputable journals. We are especially looking for candidates with experience in optical flow, simultaneous localization and mapping (SLAM), 3D vision, visual servoing, GPU/FPGA programming and embedded systems. The candidate should have a broad mathematical background, including a strong foundation in estimation theory, in order to be able to connect the dots between imaging, dynamic environments and control systems.
It is expected that the successful applicant will contribute to key research activities at ITK, including applications such as autonomous unmanned vehicles, robotics, marine operations, fisheries and aquaculture, offshore renewable energy, automated drilling, process control, medical motion analysis, embedded and real-time systems, systems engineering and instrumentation. ITK has extensive infrastructure to support research on robotic vision, and several laboratories have autonomous vehicles or robotics technology which can be

equipped with imaging sensors.
The candidate will join a research community at ITK which was rated "excellent from an international perspective" in the Norwegian Research Council's evaluation of 53 ICT communities in Norway in 2012, as one of three ICT communities to receive such a rating in the Norwegian university and college sector.
The position will be announced on Friday April 10, with an application deadline on Sunday May 25.
See http://www.ntnu.edu/onsagerfellowship and https://www.ntnu.edu/vacancies

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7.22. Faculty: Mines ParisTech, France

Contributed by: Pierre Rouchon, pierre.rouchon@mines-paristech.fr

Assistant Professor (Tenure Track) in Quantum Control
Institution: Mines ParisTech (Ecole Nationale Superieure des Mines de Paris)
Laboratory: Centre Automatique et Systemes (CAS)
The position is to evolve into a permanent position within 3 years in the framework of a Tenure Track procedure.
Since several years, the CAS is collaborating on the control of open quantum systems with INRIA (QUANTIC project-team of Mazyar Mirrahimi) and also with ENS-Paris (cavity quantum electrodynamics team of Serge Haroche, super- conducting quantum circuits team of Benjamin Huard).
The CAS wants to strengthen his team in the field of control theory and quantum engineering, in close collaborations with experimentalists.
The successful candidate is expected to have already proven his/her ability to elaborate academic research in quantum control and engineering. The candidate should have major contributions in quantum control and engineering: analysis of deterministic and stochastic dynamical systems; stabilization; observer and quantum filtering; modeling of open-quantum systems including decoherence and measurement back-action which are substantial ingredients of many current experiments where individual quantum systems are manipulated and controlled.
At the time of the appointment, the applicant must have a PhD degree in control theory, applied mathematics or quantum physics. Candidates wishing to apply should have a motivated and strong interest for quantum engineering related to current experiments around quantum information and computations. Post-doctoral experience in a foreign laboratory would be an asset for this position.
The applicant will have to show his/her capacity to conduct research in a multidisciplinary context, together with an aptitude for teamwork. The application file should include:

- a cover letter presenting the candidate's motivations and research project and its relation with CAS research activities on quantum control;
- a detailed curriculum vitae;
- a list of research contributions and publications;
- the PhD defence reports;
- preferably three recommendation letters to be submitted directly by the references. If not possible, the file shall include at least the names and contact details of three scientific leading figures who could be contacted to give their opinion about the candidate's profile and abilities.

The file should be sent before May 15th, 2015 to the following address:
Centre CAS-Mines ParisTech,
60 bd St Michel

75272 PARIS France,
To Nicolas Petit
And/or by e-mail to nicolas.petit@mines-paristech.fr

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7.23. Faculty: CentraleSupélec, France

Contributed by: Herve Gueguen, herve.gueguen@centralesupelec.fr

Professor in Automatic Control
The Rennes Campus of CentraleSupelec invites applications for a Professorship position in Automatic Control. CentraleSupelec is a new Engineering institute stemming from the merging of Ecole Centrale Paris and Supelec, two of the most famous French 'Grandes Ecoles'. Teaching activities are concerned with the 'Ingénieur Supélec' program in automatic field and the Joint Program with Xi'An Jiatong University (China) on smart grids. Research activities will be developed in the Hybrid System Control team of the Institute for Electronics and Telecommunications of Rennes. This team develops a research program on distributed control of network systems applied to energy efficiency of buildings and smart grids and micro-grids. It has the objective to have better considerations on vulnerability of these systems and the successful candidate is expected to strengthen this program and contribute to this new challenge.

Important Dates
Position availability: 1 October, 2015.
Applications before: 26 April 2015.

Missions: The successful candidate will take part in the 3 missions of CentraleSupélec:

- Initial Education: automatic control and system engineering for large scale and network systems and energy systems in the 'Ingénieur', Master Degree or Doctoral programs (including laboratory practical works). Development of electronic resources for e-education
- Continuing Education: Development and organization of specific program in interaction with the Executive Education Direction.
- Research: development of excellent international level research activities including the setting of national and international projects. These research activities will be developed in the field of distributed and hierarchical control of complex systems with specific considerations on state estimation, fault detection and fault-tolerant control. These points should be mainly be considered in the field of energy management and security of smart grid control.

Keywords: network system, distributed control, safety, smart grid
further information, requirements and application procedure http://www.rennes.supelec.fr/ren/rd/ash/LRUPU2015.html

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7.24. Faculty: University of New Hampshire, USA

Contributed by: May-Win Thein, may-win.thein@unh.edu

Faculty positions opening at the University of New Hampshire
* Lecturer in Mechanical Engineering
* Associate/Full Professor Tenure-Track Faculty Position
* Lecturer in Mechanical Engineering

The Department of Mechanical Engineering at the University of New Hampshire invites applications for a Lecturer position beginning August 15, 2015. The person will be responsible for teaching 4-5 courses per academic year related to thermal-fluid sciences, mechanics, engineering design, and ocean engineering/structures. The responsibilities include but are not limited to lecture development and delivery; conducting office hours and recitations; creating homework, quiz, and exam assignments, as appropriate; grading of assignments, and assigning final course grades.

The position requires a Ph.D. in Mechanical Engineering or related field along with professional and/or academic experience and accomplishments, and a demonstrated record of exceptional teaching. The candidate should provide specific and detailed descriptions of their previous teaching experience in their application. The successful candidate must have strong interpersonal and communication skills.

The position is an 88% time position, benefits eligible, and renewable pending satisfactory annual performance. Please attach a letter of interest with curriculum vitae and a list of names and contact information for three references to the online employment site https://jobs.usnh.edu. The target date for applications is May 1, 2015, but the search will remain open until the position is filled.

* Associate/Full Professor Tenure-Track Faculty Position in Ocean Engineering

The Department of Mechanical Engineering (ME) at the University of New Hampshire (UNH) invites applications for an Associate/Full Professor tenure-track faculty position in Ocean Engineering (OE) with a starting date of August 2015 or January 2016. The department is particularly interested in candidates with expertise in ocean instrumentation, including their design, calibration, and novel methodologies for their use. Expertise and experience in the use of instrumentation on ocean observing platforms (e.g., autonomous vehicles, buoys, moorings, cabled observatories) and/or synergies with other ocean engineering subdisciplines including autonomous vehicles, acoustics, optics, wave-structure interactions, or coastal processes, are desired. UNH actively creates an educational environment that fosters diversity, inclusion and quality engagement for all.

Applications from the general field of ocean and coastal engineering will be considered. Minimum qualifications for the position include a doctorate in OE or a closely related field and evidence of ability to: i) establish and maintain a productive level of scholarly work in OE; ii) excel as a teacher at both the undergraduate and graduate levels; iii) successfully mentor undergraduate and graduate research students; iv) participate in ME Department, College and University service activities. This position will be a full-time academic year appointment. Candidates will be evaluated on their: i) academic credentials; ii) scholarly record and promise; iii) commitment to teaching at the undergraduate and graduate levels; and iv) potential for meeting the UNH goal of creating an educational environment that fosters diversity, inclusion and quality engagement for all. The appointment will be at the Associate/Full Professor level.

The successful candidate will be appointed in the ME Department within the College of Engineering and Physical Sciences. The ME Department will serve as the departmental home for the new undergraduate (B.S.) degree in Ocean Engineering (OE). The existing college-wide interdisciplinary OE Graduate Program confers M.S. and Ph.D. degrees. The successful candidate will also have an affiliation with the School of Marine Sciences and Ocean Engineering (SMSOE). The SMSOE was designed to address today's highly complex ocean and coastal challenges through integrated graduate education, research and engagement. The SMSOE benefits from numerous specialized facilities - including the Jere A. Chase Ocean Engineering Laboratory, the Jackson Estuarine Laboratory, the Judd Gregg Marine Science Complex Pier and Laboratory Facilities and the Shoals Marine Laboratory - and a diverse fleet of research vessels and specialized research equipment. The SMSOE serves as an interdisciplinary nexus for marine science and ocean engineering graduate education with programs in OE and Oceanography (M.S., Ph.D.). UNH is in the top 10 in the

nation for scholarship and research expenditures in marine sciences and ocean engineering.

The application package should include a cover letter, detailed curriculum vitae, documents stating specific teaching interests and research plans (2 page maximum each) and the names of at least three references. The target date for applications is April 9, 2015, but the search will remain open until the position is filled. Consideration of applications will begin immediately. Please apply directly online at: https://jobs.usnh.edu. Computer access/assistance is available at the Human Resources Office at 603-862-0501. (TTY users 603-862-3227). Questions should be addressed to: Diane Foster, Associate Professor, Mechanical Engineering Department, University of New Hampshire, Durham, NH, 03824 (diane.foster@unh.edu).

—- UNH is a major research institution, providing comprehensive, high-quality undergraduate programs and graduate programs of distinction. The University actively promotes a dynamic learning environment in which qualified individuals of differing perspectives, life experiences, and cultural backgrounds pursue academic goals with mutual respect and shared inquiry. UNH is located in Durham on a 188-acre campus, 60 miles north of Boston and 8 miles from the Atlantic coast, and is convenient to New Hampshire's lakes and mountains. A land, sea, and space-grant university, UNH is the state's flagship public institution, enrolling 13,000 students, with a full-time faculty of over 600, offering 90 undergraduate and more than 70 graduate programs.

The University seeks excellence through diversity among its administrators, faculty, staff, and students. The university prohibits discrimination on the basis of race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, veteran status, or marital status. Application by members of all underrepresented groups is encouraged.

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7.25. Research Engineer: Rolls-Royce & Nanyang Technological University, Singapore

Contributed by: Danwei Wang, edwwang@ntu.edu.sg

Research Opening: Research Engineer (Failure Prognosis of Electrical Machines)

Project Description: The Corp Lab with partnership of Nanyang Technological University with the Rolls-Royce group is seeking a suitably qualified candidate to in the area of fault diagnosis and prognosis electrical machines.

The project involves development of multi physics models of electrical machines to estimate remaining useful life (RUL). The scope of work of this position includes development of multi physics prognosis models for induction machines, BLSG & PMSM and evaluates the performance of the developed models in real time.

Requirements:

- A degree/Masters in electrical/electronics engineering.
- A record of academic achievement
- Relevant practical experience in efficient fault prognostic/diagnostic methods for prognosticating, diagnosing common faults that could occur in electric machines and variable frequencies drives, and invent fault-tolerant topologies for motor-drive systems employed in safety-critical applications.

Application Procedure:

Interested applicants please attach your full CV, with the names and contacts (including email addresses) of 3 character referees, and all relevant academic certificates to Viswanathan (vaiyapuri.viswanathan@rolls-royce.com) or Prof Danwei Wang (EDWWANG@ntu.edu.sg).

We regret that only shortlisted candidates will be notified

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7.26. Staff & Senior Researchers: General Motors R&D, USA

Contributed by: Yilu Zhang, yilu.zhang@gm.com

General Motors R&D has one opening in the vehicle health management area for automotive powertrain systems. Depending on the background and experience, the successful candidate may qualify for either one of the two job levels. Interested candidates are encouraged to apply through the following links:
http://jobs.gm.com/job/Warren-Senior-Researcher-Diagnosis-and-Prognosis-Job-MI-48088/252041000/
http://jobs.gm.com/job/Warren-Staff-Researcher-Diagnosis-and-Prognosis-Job-MI-48088/252040900/

Staff Researcher - Diagnosis and Prognosis-RES0000488
Major Duties and Responsibilities:

- Lead the development of next-generation technologies for vehicle powertrain system diagnosis, prognosis, and fault-tolerant controls as well as integration.
- Lead the development and execution of technical plans, including concept generation, development, implementation, and evaluation.
- Set research and development strategy, generate innovative ideas, and establish new research areas
- Lead technical discussions and reviews as an expert in related areas of responsibility.
- Maintain state-of-the-art knowledge in related areas of responsibility.
- Communicate ideas, plans and results effectively via presentations and written reports.
- Work effectively with peers, management, operations groups, and outside organizations.

Qualifications Basic Required Skills:

- PhD in Electrical, Controls, Mechanical, or Aerospace Engineering with demonstrated research capability or equivalent experience
- 5-10 years of industry experience
- Strong background in vehicle powertrain control, diagnosis, and prognosis systems analysis and synthesis.
- Strong background in system diagnosis and prognosis algorithm development and integration.
- Effective verbal and written communication skills.
- Excellent interpersonal and communication skills to work effectively with GM internal and external customers.

Basic Preferred Skills:

- 10+ years of industry experience
- Track record of developing and deploying new technology
- Experience of project management
- Experience in remote and on-board diagnosis and prognosis.
- Experience in Matlab/Simulink.
- Experience in dSpace rapid prototyping.
- Experience in ETAS tools
- Experience in hardware and software development

Location: Warren, MI

Senior Researcher - Diagnosis and Prognosis-RES0000487
Major Duties and Responsibilities:

- Develop next-generation technologies for vehicle powertrain system diagnosis, prognosis, and fault-tolerant controls as well as integration.
- Develop and execute technical plans, including concept generation, development, implementation, and evaluation.
- Generate innovative ideas and establish new research areas.
- Lead technical discussions and reviews as an expert in related areas of responsibility.
- Maintain state-of-the-art knowledge in related areas of responsibility.
- Communicate ideas, plans and results effectively via presentations and written reports.
- Work effectively with peers, management, operations groups, and outside organizations.

Qualifications Basic Required Skills:

- PhD in Electrical, Controls, Mechanical, Aerospace Engineering with demonstrated research capability or equivalent experience
- Up to 5 years of industry experience
- Strong background in vehicle powertrain control, diagnosis, and prognosis systems analysis and synthesis.
- Strong background in system diagnosis and prognosis algorithm development and integration.
- Effective verbal and written communication skills.
- Excellent interpersonal and communication skills to work effectively with GM internal and external customers.

Basic Preferred Skills:

- 5+ years of industry experience
- Track record of developing and deploying new technology
- Experience of project management
- Experience in remote and on-board diagnosis and prognosis.
- Experience in Matlab/Simulink.
- Experience in dSpace rapid prototyping.
- Experience in ETAS tools
- Experience in hardware and software development

Location: Warren, MI

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