E-LETTER on Systems, Control, and Signal Processing
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Welcome to the 341 issue of the Eletter, available electronically here.
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1. IEEE CSS Headlines

1.1. 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. We also include links to the Society’s sponsored Conferences to give readers a preview of upcoming meetings.

1.2. IEEE Transactions on Automatic Control
Contributed by: Elizabeth Kovacs, ekovacs2@nd.edu

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1.3. IEEE Transactions on Automatic Control
Contributed by: Elizabeth Kovacs, ekovacs2@nd.edu

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1.4. IEEE Transactions on Control Systems Technology

Contributed by: Thomas Parisini, eic-ieeecontrolst@units.it

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1.5. IEEE Control Systems Society Technically Cosponsored Conferences

Contributed by: Luca Zaccarian, CSS AE Conferences, zaccarian@laas.fr

The following conferences have been recently included in the list of events technically cosponsored by the IEEE Control Systems Society:


For a full listing of CSS technically cosponsored conferences, please visit http://ieeecss.org/conferences/technically-cosponsored,
and for a list of the upcoming and past CSS main conferences please visit http://ieeecss.org/conferences
2. MISC

2.1. Winter School on Intelligent Transportation
Contributed by: Rong Su, rsu@ntu.edu.sg

The School of Electrical and Electronic Engineering at NTU, and the IEEE Control Systems Society Technical Committee on Smart Cities are organising the 2017 Winter School on Intelligent Transportation from Jan 16 to Jan 20, 2017 in Nanyang Executive Centre (NEC) on the campus of Nanyang Technological University. It is technically co-sponsored by the Centre of INFINITUS, the Smart Mobility Experience Lab (SMEL) at NTU, and the IEEE Control Systems Society. We have the following confirmed speakers:

Keynote Speakers
Prof Anuradha Annaswamy (MIT)
Prof Christos Cassandras (Boston University)
Dr Kian Keong Chin (LTA)
Prof Justin Dauwels (NTU)
Prof Yong Liang Guan (NTU)
Dr Jaya Shankar P. (A*STAR I2R)
Dr Laura Wynter (IBM Singapore)

Lecturers
Prof Christos Cassandras (Boston University)
Prof Amro M. Farid (Dartmouth College)
Prof (Samual) Qing-Shan Jia (Tsinghua University)
Prof Cedric Langbort (UIUC)
Prof Jonas Martensson (KTH)
Mr Dario Menichetti (PTV Group)
Prof Shinji Hara (University of Tokyo)
Prof Rong Su (NTU)
Prof Ardalan Vahidi (Clemson University)
Prof Danwei Wang (NTU)
Prof Lihua Xie (NTU)

The winter school will provide an overview of the latest technical progresses related to intelligent transportation via realistic case studies delivered by well known scholars and practitioners, and present challenges and opportunities for future research and applications. It will cover the following topics:

Smart transportation - challenges and opportunities
Big data analytics and cognitive analytics
Modeling of multi-modal transportation electrification
Coordinated signal control and sensing
Road pricing for traffic equilibrium via games
Introduction to V2X applications and services
Introduction to simulation tools to plan a future city
Integration of electrical vehicles in microgrid
Platooning

Moreover, it will provide an opportunity for all participants to gain hand-on experiences via realistic projects in a hackathon, and a networking opportunity to set up research collaborations with Singapore government agencies such as SNPO, LTA, MOT, iDA, EDB, A*STAR, and local research institutes and companies. We
will issue a certificate to each participant for the attendance of this event, and a prize of $300 plus a certificate for the winner of the hackathon competition, which will be held on Jan. 20, 2017. The registration fee of 550 SGD for international participants will cover the accommodation from Jan 15 to Jan 20, 2017, the reception and farewell banquets, tea breaks and materials distributed in the winter school. For domestic participants, the registration fee is 300 SGD, which does not include the accommodation.

This winter school will coincide with the Smart Mobility Test Bed Industry Partnership Showcase 2017, which will also be held at NEC on Jan. 18, 2017. For registered international student participants, there will be up to 10 fellowships covering the airfare and accommodation (up to 1000 SGD), on a competition basis. More details about this event, and how to register for this event and apply for a fellowship can be found on the following winter school webpage:


If you have any questions regarding this winter school, please do not hesitate to contact me at rsu@ntu.edu.sg.

We look forward to seeing you in Singapore in January 2017.

Rong Su (NTU) and Karl Henrik Johansson (KTH)

Organizers of 2017 Winter School on Intelligent Transportation

2.2. International Graduate School on Control

Contributed by: Francoise Lamnabhi-Lagarrigue, lamnabhi@l2s.centralesupelec.fr

2017 International Graduate School on Control

ECCI-IGSC-2017: extension of EARLY REGISTRATION deadline to 6 January 2017
http://www.eeci-igsc.eu/igsc-program/

How to proceed? Connect to <www.eeci-igsc.eu/registration> and

==>> either pay 20 Euros online (Paypal or Bank transfer) (they will be deducted from the registration fees)
==>> or SEND the Order Form - OR a commitment e-mail from your PhD Advisor’s - to <admin-eeci@l2s.centralesupelec.fr> and REGISTER online by ticking ‘Order Form’

Financial support will be awarded to few selected PhD or Master students.

Programme of the 2017 International Graduate School on Control (co-sponsored by IFAC http://www.ifac-control.org/news):

M01 – PARIS-SACLAY
23/01/2017-27/01/2017
Computational issues in nonlinear control
Arthur Krener, Naval Postgrad. School, Monterey, USA

M02 – PARIS-SACLAY
30/01/2017-03/02/2017
Decentralized and distributed control
Giancarlo Ferrari-Trecate, EPFL, Switzerland & Marcello Farina, Politecnico di Milano, Italy

M03 – PARIS-SACLAY
06/02/2017-10/02/2017
Model Predictive Control
Eduardo F. Camacho, University of Sevilla, Spain
Nonlinear control design via Lyapunov functions and positivity-based techniques
Frédéric Mazenc, INRIA, Paris-Saclay, France

Modeling and control of distributed parameter systems: the Port Hamiltonian Approach
Yann Le Gorrec, ENS2M, Besançon, France & Hans Zwart, University of Twente, The Netherlands

Energy-based modeling and control of physical systems
Arjan van der Schaft, University of Groningen & Dimitri Jeltsema, TU Delft, The Netherlands

Modern mathematical methods for nonlinear systems with constraints, discontinuities, impacts...
Rafal K. Goebel, Loyola University Chicago, IL, USA

Nonlinear Model Predictive Control
Frank Allgöwer & Matthias A. Müller, University of Stuttgart, Germany

Stability, control, and computation for time-delay systems
Wim Michiels, KU Leuven, Belgium & Silviu-Iulian Niculescu, CNRS, Paris-Saclay, France

Hybrid feedback control systems: analysis and design
Ricardo G. Sanfelice, University of California at Santa Cruz, California, USA

Local methods for nonlinear systems and control
Rodolphe Sepulchre & Fulvio Forni, University of Cambridge, UK

Distributed coordination of multi-agent Systems
Wei Ren, University of California, Riverside, USA

Introduction to the control of Partial Differential Equations
Enrique Zuazua, DeustoTech-Bilbao and Universidad Autónoma de Madrid, Spain

Modeling, analysis and design of wireless sensor and actuator networks
Alessandro D’Innocenzo, University of L’Aquila & Carlo Fischione, KTH Royal Inst. Tech., Sweden
M16 – GRENOBLE (France)  
24/04/2017-28/04/2017  
 Adaptive control with applications to active noise and vibration control  
Ioan D. Landau, CNRS GIPSA-LAB, Grenoble, France & Tudor-Bogdan Airimitoaie, Univ. Bordeaux, France

M17 – PARIS-SACLAY  
02/05/2017-05/05/2017  
 LMIs for optimization and control  
Didier Henrion CNRS LAAS, University of Toulouse, France

M18 – BERLIN (Germany)  
08/05/2017-12/05/2017  
 Distributed computation and control  
A. Stephen Morse, Yale University, USA

M19 – PARIS-SACLAY  
15/05/2017-19/05/2017  
 Deterministic networked control: new entropy and information concepts  
Girish Nair, University of Melbourne, Australia & Christoph Kawan, University of Passau, Germany

M20 – ISTANBUL (Turkey)  
15/05/2017-19/05/2017  
 Practical adaptive control  
Anurhanda Annaswamy, MIT, USA

M21 – PARIS-SACLAY  
29/05/2017-02/06/2017  
 Switched systems and control  
Daniel M. Liberzon, University of Illinois, USA

M22 – ST PETERSBURG (Russia)  
29/05/2017-02/06/2017  
 Nonlinear observers: applications to aerial robotic systems  
Robert Mahony, Jochen Trumpf, Australian Nat. Univ & Tarek Hamel, CNRS, Sophia-Antipolis, France

M23 – PARIS-SACLAY  
06/06/2017-09/06/2017  
 Modern Sliding Mode Control  
Leonid Fridman & Jaime A. Moreno Pérez

Contact: Janet Lucotte  
admin-eeci@l2s.centralesupelec.fr

2.3. Guidance, Navigation, and Control Listserv  
Contributed by: Tansel Yucelen, yucelen@usf.edu

Guidance, Navigation, and Control Listserv  
Guidance, Navigation, and Control Listserv is a communication tool created for researchers and educators in the Guidance, Navigation, and Control field. Its purpose is to distribute Guidance, Navigation, and Control news and announcements to subscribers on its server. Specifically, after subscribing to this listserv,
a subscriber can simply email to gnc@listserv.usf.edu for distributing intended message, where all other subscribed people will receive this message via email. Currently, this listserv has about 1,600 subscribers. To subscribe to the Guidance, Navigation, and Control Listserv, send an email to listserv@listserv.usf.edu with no text on the subject line but write "subscribe gnc" without quotation marks to the body of your email. Once subscribed, simply email to gnc@listserv.usf.edu for distributing your news and announcements. You will also start to receive most recent Guidance, Navigation, and Control news and announcements after subscribing.

Asst. Professor Tansel Yucelen
Laboratory of Autonomy, Control, Information, and Systems (LACIS)
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http://www.LACIS.team/

3. Books

3.1. Controller Tuning with Evolutionary Multiobjective Optimization. A Holistic Multiobjective Optimization Design Procedure
   Contributed by: Javier Sanchis, jsanchis@isa.upv.es

   Book Title:
   Controller Tuning with Evolutionary Multiobjective Optimization. A Holistic Multiobjective Optimization Design Procedure.

   ISBN: 978-3-319-41299-3 (Print) 978-3-319-41301-3 (Online).
   DOI 10.1007/978-3-319-41301-3.
   Springer. 2017

   Authors:
   Gilberto Reynoso-Meza. Pontifica Universidade Catolica do Parana. Curitiba.Brazil

   About:
   This book is devoted to Multiobjective Optimization Design (MOOD) procedures for controller tuning applications, by means of Evolutionary Multiobjective Optimization (EMO). It presents developments in tools, procedures and guidelines to facilitate this process, covering the three fundamental steps in the procedure: problem definition, optimization and decision-making. The book is divided into four parts. The first part, Fundamentals, focuses on the necessary theoretical background and provides specific tools for practitioners. The second part, Basics, examines a range of basic examples regarding the MOOD procedure for controller tuning, while the third part, Benchmarking, demonstrates how the MOOD procedure can be employed in several control engineering problems. The fourth part, Applications, is dedicated to implementing the MOOD procedure for controller tuning in real processes.

3.2. L2-Gain and Passivity Techniques in Nonlinear Control; Revised and Enlarged Third Edition
   Contributed by: Arjan van der Schaft, a.j.van.der.schaft@rug.nl
The third edition of this book differs substantially from the second edition that came more than fifteen years ago. Approximately one-third of the book is new material, while existing parts have undergone major rewritings and extensions. The spirit of the third edition has remained the same: to provide a compact presentation of the basic ideas in the theory of L2-gain and passivity of nonlinear systems, starting from a brief summary of classical results on input-output maps, to a broad range of analysis and control theories for nonlinear state space systems, regarded from the unifying perspective of dissipative systems theory. A major change with respect to the second edition is the splitting, as well as substantial extension, of the old chapter on dissipative systems into three separate chapters on dissipative systems theory, passive systems, and L2-gain theory. Furthermore, the old chapter on port-Hamiltonian systems has been reworked and extended into two chapters on port-Hamiltonian systems theory and on control of port-Hamiltonian systems. Also, the theory of all-pass factorizations has been augmented with a treatment of nonlinear state space spectral factorization. Finally, the third edition reflects increased attention towards network dynamics and large-scale systems, resulting in new sections on network interconnection of passive and port-Hamiltonian systems, and a network version of the small-gain theorem.

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10 Nonlinear $H_{\infty}$ Control
11 Hamilton-Jacobi Inequalities

3.3. Cognitive Radio: Interoperability Through Waveform Reconfiguration

Contributed by: Mitch Kokar, m.kokar@neu.edu

Title: Cognitive Radio: Interoperability Through Waveform Reconfiguration
Authors: Leszek Lechowicz and Mieczyslaw M. Kokar
Publisher: Artech House

Abstract:
This book describes an approach to dealing with change of waveforms during the operation of radios. In the scenario discussed in this book, one of the radios has a formal specification and design of a waveform, while the other radio has only some of the lower level software components that can be aggregated into an executable waveform. Additionally, the first radio knows the specifications of the behavior of the waveform encoded in a formal language as finite state machines. After receiving the formal description of the new waveform, the second radio auto-generates the waveform code and the two radios continue to communicate.
using this waveform. The book provides the description of how an experimental system was implemented using three simple types of waveform – BPSK31, QPSK31 and RTTY. The expected advantages of this approach are envisioned due to the replacement of (expensive) code development by automatic generation of code from formal specifications, as well as in a rapid implementation of new waveforms in situations when a replacement of the current waveform can lead to either a more efficient communication or to a more secure communication link.

4. Journals

4.1. Contents: Automatica

Contributed by: Elisa Capello, elisa.capello@polito.it

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Vol. 75, January 2017
http://www.sciencedirect.com/science/journal/00051098/75

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4.2. Contents: Journal of Modern Technology and Engineering
Contributed by: JMTE, jomardpublishing@gmail.com

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ISSN 2519-4836,

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4.3. Contents: Information and Inference
Contributed by: Katy Roberts, kathryn.roberts@oup.com

Contents, Information and Inference: A Journal of the IMA, 5 (4)
Information and Inference: A Journal of the IMA
This issue is available at http://bit.ly/2gABv91
- Total variation regularization on Riemannian manifolds by iteratively reweighted minimization, Philipp Grohs and Markus Sprecher, http://bit.ly/2hEX8db

4.4. Contents: Mathematics of Control, Signals, and Systems
Contributed by: Lars Gruene, lars.gruene@uni-bayreuth.de

Mathematics of Control, Signals, and Systems (MCSS)
Volume 28, Number 3 and 4
http://link.springer.com/journal/498/28/3
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4.5. Contents: Asian Journal of Control
Contributed by: Lichen Fu, lichen@ntu.edu.tw

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Vol.18, No.6 November, 2016
Authors: Kiran S. Sajjanshetty and Michael G. Safonov

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4.6. Contents: Control Engineering Practice
Contributed by: Martin Böck, cep@acin.tuwien.ac.at

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Contributed by: PIAM, proceedings.iam@gmail.com
Proceedings of the Institute of Applied Mathematics, V.5, N.2, 2016 ISSN 2225-0530,
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- Algorithm to solution of identification problem to determine the parameters of discrete dynamic systems, N.S. Hajieva, A.A. Namazov, I.M. Askerov, I.A. Maharramov.

4.8. CFP: Journal of Control Science and Engineering
Contributed by: Tushar Jain, tushar@iitmandi.ac.in
CFP: Special Issue on System Modeling, Control, and Diagnosis for Energy Efficiency in Buildings, Journal of Control Science and Engineering
Energy utilization in buildings relies on numerous factors, such as building structure, energy management systems design, and effective control and maintenance under the varying thermal or cooling load. Their heterogeneous operational characteristics contribute to serious environmental and economic problems due to excessive consumption of energy and other resources.
Consequently, there is a growing interest in high performance buildings where the underlying concept of performance incorporates energy efficiency, thermal performance, and healthy indoor environment.
Achieving this high performance objective is mainly dependent on enhanced control strategies and the continuous commissioning of the building Heating, Ventilation and Air-Conditioning (HVAC) systems under the constraints of economically managing the energy flows within the building to meet the needs of the occupants. The related challenges encompass describing the complex nonlinear dynamics of the building, deriving mathematical models for control, and deploying different control strategies for different weather conditions and occupancy profile.
Even when the building automation system or when advanced controllers are applied to enhance system efficiency, faults can occur during installation, routine operations, or scheduled preventive maintenances, resulting in excessive energy waste. This calls for more sophisticated and tailored algorithms for analysis and control, yielding energy efficient solutions for smart buildings.
The purpose of this special issue is primarily to publish high quality research papers as well as review articles on recent advances on operating buildings in an energy efficient way through building and HVAC modeling, diagnostics, and controls. Original contributions that are not yet published or that are not currently under review in other journals or peer-reviewed conferences are invited, in particular, manuscripts containing novel ideas and algorithms with practical/experimental applications.

Potential topics include, but are not limited to, the following:

- Monozone/multizone modeling approaches and HVAC components modeling
- Building simulation tools and platforms
- Optimal supervisory control and model-based predictive control for building systems
- Energy-optimal control for space-conditioning systems
- Fault detection and diagnosis of HVAC and building systems
- Fault-tolerant control of HVAC systems
- Continuous commissioning
- Whole-building optimization
- Green energy rating systems in buildings
- Economic performance analysis of the building

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/jcse/smcd/.

Manuscript Due Friday, 17 March 2017
First Round of Reviews Friday, 9 June 2017
Publication Date Friday, 4 August 2017

Lead Guest Editor:
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Alessandro Beghi, University of Padova, Padova, Italy
Du Zhimin, Shanghai Jiao Tong University, Shanghai, China

4.9. CFP: Control Engineering Practice
Contributed by: Fan Yang, yangfan@tsinghua.edu.cn

CFP: Control Engineering Practice
Call for Papers to Special Issue on Advanced Alarm Monitoring for Complex Industrial Facilities

Alarm systems play critically important roles for safety and efficiency of modern industrial plants such as oil refineries, petrochemical facilities, mineral processes, pulp-papper and power plants. However, in industrial practice many existing alarm systems are associated with poor performance, with the most common observation being that “there are far too many alarms to be handled by industrial plant operators”. Driven by the big gap between poor performance of industrial alarm systems and their importance for operational safety and efficiency, alarm systems have received increasing attentions recently from both academic and industrial communities. Many new technologies for alarm systems have been emerging in recent several years, but certainly there are far more problems to be solved in order to fill the big gap mentioned above. These emerging techniques are interdisciplinary, involving knowledge from process operation, statistics, signal processing, human factors engineering and other areas. In addition, it has become apparent that the
concepts and related unsolved problems for alarm systems are very unique, for example, the detection and removal of nuisance alarms including chattering alarms, oscillatory alarms, and long-standing alarms, the assignment of dynamic alarm priorities and the analysis and prediction of alarm floods. These problems are very different from relatively well-developed techniques in related areas such as fault detection and diagnosis, and process controller design, even though these areas are closely interrelated to some extent. Therefore, a special issue on Advanced Alarm Monitoring for Complex Industrial Facilities is proposed, in order to present some new techniques for alarm systems, and attract more academic researchers and industrial practitioners into working and shaping this fascinating and important area.

Guest Editors:
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Timelines
Submission deadline: 1 Mar 2017
Final acceptance notification: 1 Oct 2017

Learn more about this topic at https://www.journals.elsevier.com/control-engineering-practice/call-for-papers/special-issue-on-advanced-alarm-monitoring-for-complex-indus

5. Conferences

5.1. International Conference on Unmanned Aircraft Systems
Contributed by: Youmin Zhang, Youmin.Zhang@concordia.ca


On behalf of the ICUAS’17 Organizing Committee, this is to invite you to submit your contributions to the 2017 International Conference on Unmanned Aircraft Systems, ICUAS’17, http://www.uasconferences.com, to be held on June 13-16, 2017 in the luxurious Miami Marriott Biscayne Bay, Miami, FL, USA (http://www.marriott.com/hotels/travel/miabb-miami-marriott-biscayne-bay/).

The conference is co-sponsored by the IEEE CSS and RAS, and several other organizations.

The ICUAS’17 will be started on June 13 with a Workshop/Tutorial day, followed by a three-day technical Conference on June 14-16. Judging from the interest ICUAS has drawn over the past eight years and its growth, ICUAS’17 is again expected to continue on this path and attract the highest number of participants from academia, industry, federal and state agencies, government, the private sector, users, practitioners and engineers who wish to be affiliated with and contribute technically to this highly demanding and rapidly evolving and expanding field. Details may be found at http://www.uasconferences.com and related links. ICUAS’17 is fully sponsored by the ICUAS Association, a non-profit organization; Information about the organization may be found at www.icuas.com.

The theme of ICUAS’17 will focus on the very challenging and timely topic of ‘networked unmanned systems’. National and international organizations, agencies, industry, military and civilian authorities are working towards defining roadmaps of UAS expectations, technical requirements and standards that are prerequisite
to their full utilization, as well as legal, policy and ethical issues. The next generation of UAS is expected to be used for a wide spectrum of civilian and public domain applications. Challenges to be faced and overcome include, among others, see-and-avoid systems, robust and fault-tolerant flight control systems, payloads, communications, levels of autonomy, manned-unmanned swarms, network-controlled swarms, as well as challenges related to policies, procedures, regulations, safety, risk analysis assessment, airworthiness, certification issues, operational constraints, standardization and frequency management, all of paramount importance, which, coupled with ‘smart’, ‘environmentally friendly’, "reliable" cutting edge technologies will pave the way towards full integration of UAS with manned aviation and into the respective national airspace.

ICUAS’17 aims at bringing together different groups of qualified military and civilian representatives worldwide, organization representatives, funding agencies, industry and academia, to discuss the current state of UAS advances, and the roadmap to their full utilization in civilian and public domains. Special emphasis will be given to current and future research opportunities, and to ‘what comes next’ in terms of the essential technologies that need to be utilized to advance further UAS.

Conference topics include (but not limited to): Airspace Control; Integration; See-and-Avoid Systems; Airspace Management; Interoperability; Security; Airworthiness; Levels of Safety; Sensor Fusion; Air Vehicle Operations; Manned/Unmanned Aviation; Simulation; Autonomy; Micro- and Mini- UAS; Smart Sensors; Biologically Inspired UAS; Navigation; Standardization; Certification; Networked Swarms; Swarms; Control Architectures; Payloads; Technology Challenges; Energy Efficient UAS; Path Planning; Training; Environmental Issues; Regulations; UAS Applications; Fail-Safe Systems; Reliability of UAS; UAS Communications; Frequency Management; Risk Analysis; UAS Testbeds.

Unmanned system collaboration and coordination, cooperative/formation control, validation and verification and unmanned system design for assured autonomy, are topics of great interest to ICUAS’17.

Through Keynote addresses, round table panel discussions and presentations, it is expected that the outcome of the Conference will be a clear understanding of what industry, military, civilian, national/international authorities need, and what are the crucial next steps that need to be completed before UAS are utilized in everyday life applications.

Important Dates: (Please check the latest information at http://www.uasconferences.com)
February 12, 2017: Full Papers/Invited Papers/Tutorial Proposals Due
April 14, 2017: Acceptance/Rejection Notification
May 5, 2017: Upload Final, Camera Ready Papers
April 14 – May 5, 2017: Early Registration

Paper Submission:
All papers must be submitted and uploaded electronically. Go to https://contols.papercept.net. Click on the link “Submit a Contribution to ICUAS’17” and follow the steps. The paper format must follow IEEE paper submission rules, two-column format using 10 point fonts, Times New Roman. The maximum number of pages per submitted paper is 10. For accepted papers, up to two additional pages will be permitted for a charge of $100 per additional page. Illustrations and references are included in the page count. Invited and Special Sessions: Proposals for invited/special sessions must be submitted/uploaded electronically. A Summary Statement describing the motivation and relevance of the proposed session, invited paper titles and author names must be uploaded electronically by February 12, 2017. In addition, authors must submit FULL versions of invited papers electronically, through https://contols.papercept.net. Each paper must be marked as 'Invited Session Paper'. Workshops/Tutorials: Proposals for workshops/tutorials should contain title, the list of speakers, and extended summaries (2000 words) of their presentations. Proposals must be sent by e-mail to the Tutorial/Workshop Chair by February 12, 2017. Paper Review Process: All submitted papers
will undergo a peer review process coordinated by the Program Chairs, Advisory Committee Members, IPC members and qualified reviewers. Authors will be notified of results at the latest by April 14, 2017. Accepted papers must be uploaded electronically no later than May 5, 2017. Authors are encouraged to accompany their presentations with multimedia material, which will be included in the Conference Digital Proceedings. Conference Proceedings will be acquired by IEEE and they appear in IEEE Xplore.

Welcome and look forward to receiving your contributions and attendance to the ICUAS’17!

5.2. Mediterranean Conference on Control and Automation

Contributed by: Didier THEILLIOL, didier.theilliol@univ-lorraine.fr

25th Mediterranean Conference on Control and Automation - MED’17
Valletta, Malta
July 3-6, 2017
https://www.um.edu.mt/events/med2017/

Important Dates/Deadlines:
Full Papers / Invited Sessions / Tutorial Proposals: February 6, 2017
Acceptance / Rejection Notification: April 17, 2017
Upload Final Papers: May 5, 2017
Early Registration Deadline: May 5, 2017

The theme of MED’17 centers on control and automation challenges and opportunities in the 21st century and on control of autonomous systems. MED’17 spans four full days. July 3 is devoted to Tutorials and Workshops, followed by the three day technical conference on July 4-6. The conference, through its technical program and keynote presentations, will provide a unique opportunity for the academic, research and industrial community to address new challenges, share solutions and discuss future research directions. A broad range of topics is proposed, following current trends of combining control and systems theory with hardware/software and communication technologies, as well as new developments in robotics and mechatronics, autonomous systems, unmanned systems, cyber physical systems, network controlled systems, with the goal of strengthening cooperation of control and automation scientists with industry.

MED’17 will feature keynote lectures by:
- Professor Raffaello D’Andrea from the Institute for Dynamic Systems and Control at the Swiss Federal Institute of Technology (ETH);
- Professor Visakan Kadirkamanathan from the Department of Automatic Control and Systems Engineering at the University of Sheffield;
- Professor Marios Polycarpou from the KIOS Center for Intelligent Systems and Networks at the University of Cyprus.

For topics of interest please visit the conference website.

Paper Submission:
The Program Chairs are soliciting contributed technical papers for presentation at the Conference and publication in the Conference Digital Proceedings. All papers must be submitted and uploaded electronically. Go to https://controls.papercept.net. Click on the link “Submit a Contribution to MED’17” and follow the steps. The paper format must follow IEEE paper submission rules, two-column format using 12 point fonts, Times New Roman. The maximum number of pages per submitted paper is 6. Up to two additional pages will be permitted for a charge of 100 euro per additional page. Illustrations and references are included in the page count.
Invited and Special Sessions:
Proposals for invited and special sessions by topic of interest must be submitted and uploaded electronically. A Summary Statement describing the motivation and relevance of the proposed session, invited paper titles and author names must be uploaded electronically by February 6, 2017. In addition, authors must submit full versions of invited papers electronically, through https://controls.papercept.net. Each such paper must be marked as 'Invited Session Paper'

Workshops – Tutorials:
Proposals for workshops - tutorials should contain the title of the session, the list of speakers, and extended summaries (2000 words) of their presentations. Proposals must be sent by e-mail to the Tutorial and Workshop Chair by February 6, 2017.

Paper Review Process:
All submitted papers will undergo a peer review process coordinated by the Program Chairs, Advisory Committee Members, IPC members and qualified reviewers. Authors are encouraged to accompany their presentations with multimedia material (i.e. videos), which will be included in the Conference Digital Proceedings. Conference Proceedings will be acquired by IEEE and appear in IEEE Xplore.

For information and details about the Conference, contact by e-mail the General or Program Chairs (med2017@um.edu.mt).

Important Dates/Deadlines:
Full Papers / Invited Sessions / Tutorial Proposals: February 6, 2017
Acceptance / Rejection Notification: April 17, 2017
Upload Final Papers: May 5, 2017
Early Registration Deadline: May 5, 2017

5.3. International Conference on Information Fusion
Contributed by: Zhansheng Duan, zsduan@mail.xjtu.edu.cn

20th International Conference on Information Fusion (FUSION 2017)
July 10-13, 2017
Xi’an, China
URL: http://www.fusion2017.org

The International Conference on Information Fusion is a premier forum for interchange of the latest research in information fusion and discussion of its impacts on our society. The conference brings together researchers and practitioners from industry and academia to report on the latest scientific and technical advances. Authors are invited to submit papers describing advances and applications in information fusion.

Fusion 2017 will be held in Xi’an, China at the Wyndham Hotel on July 10–13, 2017. Xi’an is the best representative city of Ancient China It has more than 3100 years of history Since the 11th century BC it had been China’s Capital for more than 1100 years under 13 dynasties, including several most important ones such as Zhou, Qin, Han, Sui, and Tang. Xi’an was the root of the Silk Road, which connected the East and the West, and is the home of the world-famous Terracotta Army of more than 2200 years ago. In modern times, Xi’an has re-emerged as the center of the northwest China.

Topics of interest
1. Theory and Representation: Probability theory, Bayesian inference, fuzzy sets and fuzzy logic, Dempster-Shafer theory, belief functions, logic-based fusion and preference aggregation, random sets, finite set statistics,
topic modeling.

2. Algorithms: Registration, detection, localization and signal processing, automatic target recognition and classification, nonlinear filtering, tracking and data association, automated situation assessment, prediction, pattern and behavioral analysis, distributed fusion process and sensor resource management.


4. Data Specific Processing and Fusion: Image and video, radar, passive sensors; soft data sources.

5. Modeling, simulation and evaluation: Target and sensor modeling, benchmarks, testbeds, fusion performance modeling and evaluation.

6. Applications: Aided fusion, sensor networks, persistent surveillance, defense and intelligence, security, robotics, transportation and logistics, manufacturing, economics and financial, environmental monitoring, medical care, bioinformatics.

20th Anniversary Forum: Fusion 2017 will organize a special forum to celebrate the 20th anniversary. Candidate topics include: the (early) history of the Fusion Conferences and ISIF, significant achievements and major challenges of fusion research representative successful applications of fusion technologies, future trend and development of fusion research and technologies.

Paper Submissions: Prospective authors are invited to submit papers electronically via the system found at the conference web page. Paper templates and submission instructions will be available at the conference website. Paper submissions are due by 1 March 2017 and should be no more than ten pages in length. There will be a charge for each additional page beyond eight pages. All papers must be approved for public release via the appropriate procedure of their employers/funding agencies prior to submittal. The research papers published in Fusion proceedings had been indexed by EI. All accepted papers must be written in English and will be published in Fusion conference proceedings, which will be indexed by EI and IEEE Xplore.

Special Session Proposals: Proposers are invited to submit via the conference web page the theme of the special session as well as a list of possible committed papers. Proposals for special sessions are due by 1 February 2017. Papers for special sessions must also be submitted for review by 1 March 2017.

Tutorial Proposals: The first day of the conference will be devoted to tutorials on information fusion. Proposals for tutorials are invited. A title and description of the tutorial and biographical sketch of the instructor are due via the conference web page by 1 February 2017.

Student Paper Program: Fusion 2017 is featuring a student paper program to encourage the involvement of young engineers and scientists in information fusion. Conference fees will be discounted for all student attendees. Further details will be available at the conference website.

Important Deadlines:
Special session proposals, tutorial proposals February 1, 2017
Full paper submission March 1, 2017
Notification of acceptance May 1, 2017
Final paper submission, early registration June 1, 2017

5.4. International Conference on Methods and Models in Automation and Robotics
Contributed by: Pawel Dworak, pawel.dworak@zut.edu.pl

22nd International Conference on Methods and Models in Automation and Robotics
28-31 August 2017
Amber Baltic Hotel, Miedzyzdroje, Poland
It is our great pleasure to invite You to participate in the 22nd International Conference on Methods and Models in Automation and Robotics, MMAR 2017 to be held in Miedzyzdroje, Poland, from August 28th to August 31st, 2017.

The Conference will be a good opportunity for highlighting the new results and directions of Automatic Control theory, technology and applications. As such, it mainly will concentrate on the following key points:
– emphasis on invited lectures including plenaries,
– industry participation promotion,
– attract young people to study and work in the field.

The participants of the 22nd International MMAR Conference will have the opportunity to take part in the wide spectrum of categories for technical presentations, including plenary lectures, regular papers of both lecture and poster session types, and panel discussion. We look forward to seeing our old and new friends in Poland. You are kindly invited to participate in the 22nd International MMAR Conference in Miedzyzdroje, Poland.

Important Dates: (Please check the latest information at http://www.mmar.edu.pl)
6 March 2017 – Full Paper Submission
15 May 2017 – Notification of Acceptance
26 June 2017 – Author Registration and Payment
3 July 2017 – Camera-Ready Paper Submission

The proceedings of the conference will be submitted for review and approval for inclusion in the IEEE Xplore® Digital Library and will be submitted for inclusion in the Conference Proceedings Citation Index - Science (ISI Web of Science).

For more information see http://www.mmar.edu.pl

5.5. IEEE International Conference on Control & Automation
Contributed by: Lu Liu, luliu45@cityu.edu.hk

2017 13th IEEE International Conference on Control & Automation (IEEE ICCA 2017)
July 3-6, 2017
Ohrid, Macedonia
http://www.ieee-icca.org/

Deadline for Manuscript Submissions: extended to January 20, 2017

The 13th IEEE International Conference on Control & Automation (IEEE ICCA 2017) will be held on July 3-6, 2017, in Ohrid, Macedonia. It is to create a forum for scientists and practicing engineers throughout the world to present the latest research findings and ideas in the areas of control and automation. The conference is featured with Best Paper Award and Best Student Paper Award. Past IEEE ICCA Proceedings have been included in EI Compendex, IEEE Xplore and ISI Proceedings.

The conference will be held in Ohrid, a beautiful city in the Republic of Macedonia and the seat of Ohrid Municipality. It is the largest city on Lake Ohrid and notable for once having had 365 churches. It was accepted as Cultural and Natural World Heritage Sites by UNESCO and one of only 28 sites that are part of UNESCO’s World Heritage that are both Cultural and Natural sites.

Important Dates
Deadline for Manuscript Submissions: January 20, 2017
Notification of Acceptance: March 15, 2017
Submission of Final Manuscripts: April 15, 2017
Conference: July 3–6, 2017


Keynote Speeches:
- Extremum Seeking and its Applications, Professor Miroslav Krstic, University of California at San Diego, USA.
- Analysis and Control of Collective Behaviour in Complex Multi-agent Systems, Professor Mario di Bernardo, University of Bristol, U.K. and University of Naples, Italy.
- Representations of the Saturation Nonlinearities and Constructions of Lyapunov Functions for Control Systems with Actuator Saturation, Professor Zongli Lin, University of Virginia, USA.

Submission of Papers:
Authors should submit the full version of their manuscripts online through the conference website at http://www.ieee-icca.org (or http://uav.ece.nus.edu.sg/ icca17/). General inquiries should be addressed directly to Program Chair, Professor Lu Liu, at City University of Hong Kong (email: lliu4579@gmail.com).

Proposals for invited sessions in the related areas are also solicited and should be submitted through email to Invited Session Chair, Professor Keyou You at Tsinghua University(email: youky@tsinghua.edu.cn).

More detailed information about conference sponsors, conference technical program, organizing committee and more can be found on the conference web page.

5.6. Symposium on Predictive Control of Electrical Drives and Power Electronics
Contributed by: Vaclav Smidl, vsmidl@rice.zcu.cz

Call for papers
4th Symposium on Predictive Control of Electrical Drives and Power Electronics, PRECEDE 2017

We are pleased to invite you to this year’s IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics (PRECEDE 2017), a forum for international experts to discuss questions and concepts concerning both related fields of research.

OBJECTIVES:
Bring together specialists for deep focused discussion of predictive control
Prefer quality over quantity
Single-track oral presentation and long time planned for discussions

TOPICS:
- New predictive control algorithms and applications.
- Robustness and stability of predictive control methods.
- Implementation issues (e.g. FPGA, DSP, etc.).
- Impact of secondary effects (saturation, noise).
- Parameter identification/estimation.
- Applications and case studies: industrial, transportation, power engineering, domestic

IMPORTANT DATES:
Digest Submission Deadline: April 1st, 2017
Notification of Acceptance: June 15th 2017
Final Submission Deadline: August 5th, 2017

VENUE:
Pilsen is a historical town in West Bohemia, Czech Republic. It is famous for the "pilsner" style beer that was first brewed here. Brewery tour is a part of the social program of the conference. Nowadays it is an industrial town with growing high tech industrial zone.
The conference will take place in a newly constructed regional innovation center for electrical engineering, RICE: http://rice.zcu.cz

PEER REVIEW:
Submission of blind digests is required for double blind review process. After acceptance, the final paper should be prepared in IEEE style and will be published in IEEE Xplore.

5.7. Professional Engineering Seminars to Advance Machine Fluid Power, Electronic Control
Contributed by: Karl Robe, karl.robe@karljamess.com

GS GLOBAL RESOURCES, MSOE APPLIED TECH CENTER ANNOUNCE SEMINARS
Professional engineering seminars to advance machine fluid power, electronic control
MUKWONAGO, Wis.—December 13, 2016—GS Global Resources, industry leaders in mobile and industrial machine performance, and MSOE Applied Technology Center today announced a new seminar series for industry professionals and hydraulic systems engineers.

“Machine manufacturing professionals now can explore leading-edge fluid power and electronic control applications at one of industry’s highly-regarded systems integrators,” MSOE Director of Professional Education & Research Development Dr. Medhat Kahlil says.

Seminar attendees will gain technical knowledge and industry contacts. This combination of professional development and networking is designed to enhance careers and ongoing development within MSOE’s renowned technical training structure.

The 2017 seminar series will be hosted at GS Global Resources’ new 115,000-square-foot facility, where the systems integrator delivers advanced machine design and application engineering solutions to OEMs. The first of seven seminars begins in January and runs through October. (See full schedule below.)

“For many years we’ve provided our OEM customers with supplier-led innovation and education on machine performance technology,” GS Global Resources President John Thornton says. “Partnering with MSOE on this seminar series is a natural extension of practical hydraulic, electronic, mechanical and software application insights we offer manufacturing customers.”

For more information and to register, visit www.msoe.edu/seminars

2017 MSOE Applied Technology Center & GS Global Resources Seminar Series Schedule
Jan. 23-27: Introduction to Hydraulics for Industry Professionals
Feb. 20-24: Electrohydraulic Components & Systems
May 1-5: Introduction to Hydraulics for Industry Professionals
June 19-21: Hydraulic Specialist Certification Review
Sep. 11-15: Introduction to Hydraulics for Industry Professionals
Oct. 13-17: Hydraulics Systems Modeling & Simulation for Application Engineers
Oct. 16-20: Service and Operation for Improved Hydraulic System Reliability

About GS Global Resources
GS Global Resources is the foremost machine performance resource trusted by industrial and mobile OEMs who demand competitive advantage from every solution. At GS Global Resources, the leading engineering minds in hydraulic, electronic, mechanical and software applications simplify the complex. We use innovative, reliable technologies to speed solutions to market. And, whether reacting to market forces or changing markets altogether, GS Global Resources is essential to achieving total machine performance. From system and component design to production and market support, GS Global Resources helps OEMs interpret, adapt and adopt technology. Visit www.GSGlobalResources.com to learn more.

About MSOE Applied Technology CenterTM
MSOE Applied Technology CenterTM (ATC) regularly offers seminars that are designed to keep engineers and managers abreast of cutting-edge technological development, current applications and newly developed techniques. While some of these seminars focus on the foundation of fluid power, others explore more advanced sophisticated concepts in a high-tech, applications-oriented environment. Visit www.msoe.edu/seminars to learn more.

6. Positions

6.1. PhD: Brose Fahrzeugteile GmbH, Germany & UPC-BarcelonaTech, Spain
Contributed by: Cristian Kunusch, cristian.kunusch@brose.com

Project title:
Control strategies for high speed compression systems: application to fuel cell vehicles

Project description:
The aim of the project related to the offered position is to develop and implement nonlinear control strategies for the fuel-cell-based vehicles. Based on a state of the art related to air turbo-compressor technology, the work will be focused on both the design of control strategies and the experimental validation of Hardware in the Loop (HiL) approaches at component level. Certain vehicle integration tasks will be also performed. The PhD researcher will spend at least 80% of time at Brose Fahrzeugteile GmbH (Würzburg, Germany) and rest of the time at UPC-BarcelonaTech (Barcelona, Spain). She/he will be awarded a doctoral diploma upon a successful completion.

What do we offer: an interdisciplinary 3 years research project, a stimulating environment in a well-known automotive company and at a Europe’s top university, a balanced and personally tailored PhD trajectory, exposure to both academic and industrial environments, and a highly competitive salary.

Eligibility criteria:
The applicant should have a MSc. (or equivalent) degree in Electrical/Mechanical Engineering (or equivalent), a strong mathematical background with good knowledge in control, good programming skills, proficiency in Matlab/Simulink environment and excellent writing and communication skills in English.

Previous experience in the following areas will be highly valued:
- Electrical drives and motor control
- Automotive engineering
• Real-time systems
• Automatic control theory
• Fuel cell systems
• Fluid dynamics
• Compression systems
• CAD and mechanical design
• German language

Contact
Applicants seeking further information are invited to contact Dr. Cristian Kunusch (cristian.kunusch@brose.com) with the following information:
- CV with contact details
- Bachelor and master transcripts (including list of courses with corresponding grades)
- A summary of (or an e-link to) your master thesis
- Name and email of two references

Closing date for applications
15.02.2017

6.2. PhD: University of Leicester, UK
Contributed by: Andrea Lecchini-Visintini, alv1@leicester.ac.uk

Fully funded PhD scholarship in Bioinformatics

The College of Science and Engineering and the College of Medicine, Biological Sciences and Psychology, University of Leicester, offer a fully funded PhD studentship in Bioinformatics:

Intracranial pressure estimation using ultrasound for non-invasive diagnosis and monitoring of brain injury

Raised Intracranial Pressure (ICP) can occur in patients with bleeding or swelling of the brain due to head trauma, and if untreated, can lead to devastating damage. Prompt recognition and treatment is of paramount importance, but current monitoring methods require measuring ICP by neurosurgical insertion of a device beneath the skull, which is extremely invasive.

This PhD project will develop and assess a new method for non-invasive estimation of ICP based on ultrasound measurements of brain tissue pulsation. The project will support the development of a portable clinical ultrasound prototype being pioneered at Leicester for rapid assessment of brain injury.

The PhD will start with the development of a hydro-mechanical model of healthy and injured brain tissue pulsation, to capture the impact of blood perfusion, ICP, brain tissue compliance, and other parameters. This will then be used to estimate ICP non-invasively for validation against invasive ICP measurements from head trauma patients monitored in intensive care.

This research has potential to revolutionise treatment of brain-injured patients and is expected to generate several high profile biomedical engineering and clinical publications, international conference presentations, and collaborations with medical device manufacturers.

The studentship is full-time and available to UK/EU students. Fees, bench contribution and RCUK equivalent stipend will be covered.

The ideal candidate will have a degree in Engineering, Physics, or Applied Mathematics and an interest in applying physiological modelling and estimation techniques for the benefit of patients.
The successful applicant will be supervised by Dr Andrea Lecchini-Visintini (Department of Engineering) and Dr Emma Chung (Department of Cardiovascular Sciences).

The full advert is available online at: http://goo.gl/0wDmy2

The closing date is 12 noon (UK time) on 17 February 2017.

Candidates should contact Dr Lecchini-Visintini <alv1@leicester.ac.uk> before applying.

6.3. PhD: University of Georgia, USA

Contributed by: Javad M. Velni, javadm@uga.edu

PhD position in control of multi-agent systems at the University of Georgia

We have an opening for an outstanding PhD student to work on developing coverage control algorithms for heterogeneous multi-agent systems. The position is available from May 2017. Candidates should have a strong background in stochastic control, as well as optimization theory. Prior knowledge of multi-agent systems control and graph theory is desirable.

To apply, please submit your CV and a cover letter describing your interest in the position in a single pdf file to Dr. Javad M. Velni at javadm@uga.edu.

6.4. PhD/PostDoc/Research Assistant: New York University Abu Dhabi, UAE

Contributed by: Nikolaos Freris, nf47@nyu.edu

RESEARCH OPPORTUNITIES IN CYBERPHYSICAL SYSTEMS

The Cyberphysical Systems Lab at New York University Abu Dhabi is hiring researchers at all levels: PhD Student, Postdoctoral Fellow, Research Assistant, in Electrical Engineering or Computer Science.

About: The focus of the Cyberphysical Systems Lab (CPSLab) is to conduct interdisciplinary research across a wide range of topics and applications related to cyberphysical systems, such as: a) distributed algorithms for estimation, optimization and control, b) big data: data mining/machine learning algorithms, c) wireless sensor networks, d) system theory: control & optimization, e) signal processing: sparse sampling and online algorithms, as well as applications in signal processing, transportation, cybersecurity, networking, robotics, and biomedical modeling.

Requirements: Research Assistant and PhD applicants must hold (or be close to completing) an MS degree, and Postdoctoral Fellows a PhD, in Electrical Engineering, Computer Science, or Applied Mathematics with significant research experience in at least one of the aforementioned areas. PhD applicants need to also apply directly to NYU for admission by Dec. 15. A proven publication record, solid mathematical background, excellent communication skills, and the ability to work in multi-disciplinary teams are essential. Applicants must submit a CV, research statement, cover letter with a brief research plan, along with the names and contact information for three recommenders in a single PDF file to Prof. Nikolaos Freris (nf47@nyu.edu).

Start date & Salary: The start date is flexible. A very competitive salary and benefits package (including relocation, housing, insurance, transportation and conference travel support) are provided – note: UAE do not levy any income tax.

For more information, please visit: https://wp.nyu.edu/cpslab

About NYUAD: New York University has established itself as a Global Network University, a multi-site, organically connected network encompassing key global cities and idea capitals. The network has three
foundational degree-granting campuses: New York, Abu Dhabi, and Shanghai, complemented by a network of 12 research and study-away sites across five continents. Faculty and students circulate within the network in pursuit of common research interests and the promotion of cross-cultural and interdisciplinary endeavors, both local and global.

Entering its sixth year, NYU Abu Dhabi has recruited a cohort of faculty who are at once distinguished in both research and teaching. Our students are drawn from around the world and surpass all traditional recruitment benchmarks, both US and global. NYU Abu Dhabi’s highly selective liberal arts enterprise is enhanced by an institute for advanced research, sponsoring cutting-edge projects across the Arts, Humanities, Social Sciences, Sciences, and Engineering. NYUAD is housed at a newly built campus in the vibrant city of Abu Dhabi, the capital of UAE.

NYUAD is an Equal Opportunity/Affirmative Action Employer

6.5. PostDoc: KTH, Sweden
Contributed by: Henrik Sandberg, hsan@kth.se

1-3 Postdoctoral Researchers at the ACCESS Linnaeus Centre at KTH Royal Institute of Technology

The ACCESS Linnaeus Centre is one of Europe’s largest university research centers in networked systems. 36 senior researcher and over 70 PhD students are involved in developing fundamental understanding and engineering principles for designing self-managed and scalable communication, control and sensor networks in which applications may share real-time information and cooperate in an efficient, affordable, reliable, and secure manner.

The three positions would be placed at different schools within KTH. Read more about the schools at our website; The School of Electrical Engineering, The School of Computer Science and Communication and The School of Engineering Sciences.

We seek candidates to conduct research in the following broad areas:
- Cyber-physical systems: systems, control and communication theory, signal processing, and applications including but not restricted to: multi-agent systems, planning and coordination, critical infrastructure resiliency, advanced automotive systems, and smart buildings
- Software-defined networking: wireless and cloud networking, system and protocol design and evaluation, optimization, stability and scalability for software-based networked systems
- Data analytics: statistical inference, signal processing, machine learning, data fusion, multi-stage and distributed methods, data modeling, and information theory
- Security, privacy, and trust: design, analysis, verification, implementation and empirical evaluation of secure and privacy-preserving systems; including but not restricted to: network security, software security, cyber-physical security, privacy enhancing technologies, cryptography

KTH offers an attractive working environment with significant employment benefits. ACCESS postdoctoral researchers have the opportunity to participate in numerous activities and events (workshops, summer/winter schools, seminar series), be active in one or more thematic areas of the ACCESS center and work in a diverse research environment that can great advance their careers.

Candidates should have a strong background in at least one of the four aforementioned areas: (i) cyber-physical systems, (ii) software-defined networking, (iii) data analytics, and (iv) security, privacy, and trust. The ability and the interest to work across areas, possibly even across traditional disciplines, as well as initiate new research collaborations are essential.
Candidates must have a Ph.D. (or be near completion) in a relevant field and have an outstanding research and publication record.

Deadline Jan 31, 2017

More information and link to application:

6.6. PostDoc: Shanghai Jiaotong University, China
Contributed by: Weidong Zhang, wdzhang@sjtu.edu.cn

Postdoctoral position in Shanghai Jiaotong University, China

The Optimization & Control Engineering Research Center of Shanghai (in the Department of Automation, Shanghai Jiaotong University, China) offers 3 postdoc positions in control engineering as soon as possible thereafter. We are interested in candidates in the broad areas of advanced control theory, multi-agents formation, machine learning, pattern recognition, industrial networked control systems, etc.

Requirements and qualifications:
- PhD degree
- Documented experience with research dissemination in international scientific journals
- Experience with writing research applications
- Good communication skills in English or Chinese
- Self-motivation and the ability to work both independently and as a team player with researchers from different disciplines

Main tasks:
- Active involvement in research efforts
- Supervision of student projects and thesis at both master and Ph.D levels

Salary and others:
- RMB 120-200k/year (approximately, 18-30kUSD)
- Apartment with very cheap rent
- It is a 2 year position and can be extended to 4 years

Required documents
- One self-recommendation letter covering your research statements, your achievements, as well as your possible requirements from us
- A list of your publications

For further information, please contact Prof. Dr. Weidong Zhang, Email: wdzhang@sjtu.edu.cn, tel: +86-21-34204019. Address: Dongchuan Road 800, Shanghai Jiaotong University, Shanghai 200240, China.

6.7. PostDoc: Shanghai Jiaotong University, China
Contributed by: Weidong Zhang, wdzhang@sjtu.edu.cn

Postdoctoral position in Shanghai Jiaotong University, China

The Engineer Research Center of Marine Automation, Shanghai Municipal Education Commission (in the Department of Automation, Shanghai Jiaotong University, China) offers 3 postdoc positions in control engineering as soon as possible thereafter. We are interested in candidates in the broad areas of control engineering, ocean engineering, marine engineering, unmanned autonomous systems, etc.
Requirements and qualifications:
- PhD degree
- Documented experience with research dissemination in international scientific journals
- Experience with writing research applications
- Good communication skills in English or Chinese
- Self-motivation and the ability to work both independently and as a team player with researchers from different disciplines

Main tasks:
- Active involvement in research efforts
- Supervision of student projects and thesis at both master and Ph.D levels

Salary and others:
- RMB 120-200k/year (approximately, 18-30kUSD)
- Apartment with very cheap rent
- It is a 2 year position and can be extended to 4 years

Required documents
- One self-recommendation letter covering your research statements, your achievements, as well as your possible requirements from us
- A list of your publications

For further information, please contact Prof. Dr. Weidong Zhang, Email: wdzhang@sjtu.edu.cn, tel: +86-21-34204019. Address: Dongchuan Road 800, Shanghai Jiaotong University, Shasnghai 200240, China.

6.8. PostDoc: Technion-Israel Institute of Technology, Israel
Contributed by: Daniel Zelazo, dzelazo@technion.ac.il

Post-doctoral Fellowship at the Technion-Israel Institute of Technology
We currently have an open post-doctoral position available in the Faculty of Aerospace Engineering at the Technion. We are seeking outstanding applicants with a strong background in nonlinear control theory, optimization theory, and networked systems. Our research group focuses on a variety of problems related to networked dynamical systems, cooperative control, and multi-agent systems. Interested applicants should send their CV, publication list, and a cover letter summarizing your interests and expertise to Prof. Daniel Zelazo (dzelazo@technion.ac.il).

6.9. PostDoc: Mid-Sweden University, Sweden
Contributed by: Mikael Gidlund, mikael.gidlund@miun.se

Two postdoctoral positions available.
The Communication Systems and Networks (CSN) group at Mid-Sweden University offers one post-doctoral position in the areas of control over low-power wireless networks and one in security and privacy for cyber-physical systems. The CSN group belongs to the research center Sensible Things that Communicate which is one of the leading research centers in Sweden in the area of sensor networks and systems. The positions is for one year with possibility to extension with one year. The positions are based in Sundsvall. Candidates should have a PhD in computer science, computer engineering, electrical engineering, Signal processing, automatic control or related areas, and a track record of publications in high-quality journals.
and/or conferences. Good written/oral communication skills in English, and ability to work effectively in a collaborative team, are required. Skills and experience in both analytical and empirical research are highly desirable.

For more information about the positions and how to apply is given here:

Last day to apply is January 17th, 2017.

6.10. PostDoc: Chalmers University of Technology, Sweden
Contributed by: Balazs Kulcsar, kulcsar@chalmers.se

Information about the division
The Department of Signals and Systems within the Chalmers University of Technology, Gothenburg, Sweden, consists of several divisions such as Systems and Control, Communication Systems, Signal Processing and Biomedical Engineering, and Antennas. This research knowledge is complemented by a new initiative from Chalmers, through the Transport Area of Advance aiming at promoting cross-fertilized transportation research and by the SAFER Vehicle and Traffic Safety Center focusing on safe and efficient transportation solutions.

Major responsibilities
We invite candidates to apply for a post-doctoral position in the research field of decentralized sensing and control algorithms for large-scale transportation networks. Our main goal is to develop real-time vehicle routing strategies for a mixed human- and self-driven vehicular network, with emphasis on post-accident scenarios in large-scale road networks. We will rely on an inter-disciplinary approach between traffic theory, communication technologies and accident risk management. The topics include the duality of theoretical and application-oriented research. Her/his research activity will be shared between the Automatic Control, the Communication Systems, and the Vehicle Safety Groups (SAFER) at Chalmers University of Technology.

More information, and instructions how to apply, can be found at
Application deadline: 31/01/2017.

6.11. PostDoc: Université Libre de Bruxelles, Belgium
Contributed by: Emanuele Garone, egarone@ulb.ac.be

POSITIONS AVAILABLE : 2 Post-doc positions
SUPERVISOR : Emanuele Garone
DURATION: 24 months
SALARY: approximately 2250 Euros/months after taxes
DESCRIPTION: This postdoc is in the framework on the MIS project “optimization-free constrained control of nonlinear systems”. The ideal candidate should have a strong background in control and should master at least one of the following subjects
- nonlinear control;
- Model Predictive Control;
- Continuous Optimization Methods;
- Set invariance;
- Sum of Squares;

STARTING DATE: Between January and June 2017

REQUIREMENTS: The candidate must have obtained the title of PhD less than 5 years before the date of start of the post-doc contract. He must have spent or worked in Belgium less than 24 months in the last 36 months.

TO APPLY: Send an email to Prof. Emanuele Garone (egarone@ulb.ac.be) with you curriculum vitae in English, as well as contact information of two referees.

6.12. PostDoc: Université Libre de Bruxelles, Belgium
Contributed by: Emanuele Garone, egarone@ulb.ac.be

POSITIONS AVAILABLE : 1 Post-doc position
SUPERVISOR : Emanuele Garone
STARTING FROM: January 2017
DURATION: 12 months (possibility of renewal)
SALARY: approximately 2250 Euros/Months after taxes

DESCRIPTION: This postdoc is in the framework on the BATWAL project and concerns the optimal usage of battery energy storage in a local micro-grid context. The ideal candidate should have some experience for what concerns Model Predictive Control.

REQUIREMENTS: The candidate must have spent or worked in Belgium less than 24 months in the last 36 months.

TO APPLY: Send an email to Prof. Emanuele Garone (egarone@ulb.ac.be) with you curriculum vitae in English, as well as contact information of two referees.

6.13. PostDoc: Umeå University, Sweden
Contributed by: Leonid Freidovich, leonid.freidovich@umu.se

PostDoc: Umeå University, Sweden

Umeå University announces one stipend for postdoctoral research in Automation for heavy-duty mobile hydraulic cranes with applications in agriculture and forestry. The stipend is part of a massive effort on autonomous systems for industry and society of the future, with eight postdoctoral stipends in eight separate subprojects (see http://www.umu.se/english/about-umu/news-events/grants/6-2279–2286-16).

This subproject is aimed at proposing and testing new algorithms for automation of particular working scenarios relevant for industry-standard agricultural front-end loaders and forestry cranes. The key challenges include: the need to handle active supervision and operator take-over, the complexity of standard industrial mobile hydraulic systems with sharing hydraulic flows among various subsystems, inaccuracy of sensors functioning in harsh outdoor conditions, and the need for appropriate human-machine interface to beneficially use partial or full automation of working cycles. The scientific methods include both classical model-based approaches and new techniques, involving, in particular, switching between autonomous operation and assistance for an active human-in-the-loop control or supervision.
The stipend is for two years with a starting date to be negotiated. The stipend, provided by the Kempe Foundations, amounts to 300 000 SEK per year. The stipend is not subject to taxes.

A qualified applicant is required to have a PhD degree or a foreign degree that is deemed equivalent to PhD degree in Control Systems or Computer, Electronic, Electrical, Systems, or Mechanical Engineering, or Electronics or another subject of direct relevance for the project. The PhD degree shall not be more than three years old by the application deadline unless there are special reasons. The applicant should be strongly motivated and interested to develop new competencies, as well as to act in an international environment and collaboration with companies.

Documented knowledge and proven research experiences in at least three of the following five fields: Control Systems Engineering, Hydraulics, Industrial Automation, Mechanics and Mechanical Engineering, Electrical and Electronics Engineering is required. Good research merits and scientific publications in the area of the position are strongly meriting. International research experience is also a merit.

A successful candidate should be capable of performing practical implementations of controllers and performing hardware experiments, as well as producing scientific publications in English. Very good knowledge in the English language, both spoken and written, is required.

Application deadline is February 1, 2017. Please see http://www.umu.se/english/about-umu/news-events/grants/6-2280-16 for more details.

6.14. PostDoc: University of Sydney, Australia
Contributed by: He Kong, h.kong@acfr.usyd.edu.au

Postdoctoral Research Fellow in Multi-Vehicle Planning, Australian Centre for Field Robotics, University of Sydney

The Australian Centre for Field Robotics (ACFR) is based in the School of Aerospace, Mechanical and Mechatronic Engineering at The University of Sydney, and is dedicated to the research, development, application and dissemination of autonomous and intelligent robots and systems for operation in outdoor environments. The group has substantial experimental facilities including three laboratories and a field test site, a range of experimental and production vehicles, industry-quality mechanical and electrical design and fabrication facilities, and employs the latest in embedded computing, sensing and control technologies.

Prof. Salah Sukkarieh’s team at ACFR is looking to grow its research capabilities in the area of motion planning and scheduling for intelligent and autonomous aerospace systems, with a focus on planning and/or scheduling for multi-vehicle systems, and its practical application in air traffic flow management. We are currently seeking a self-motivated and well-qualified researcher to conduct theoretical and applied research in this area.

The research focus will be on the development of novel algorithms as well as the prototyping and validating of those algorithms to address multiple aspects of this complex planning problem. The research outcomes will be applied to an industry partnership that the ACFR has established to develop and implement algorithms for air traffic flow management in commercial aviation to provide improved operational effectiveness and airspace utilisation.

This position is full time, fixed term for 1 year, remuneration package: $104K-$139K AUD p.a. which includes leave loading and up to 17% super. This position will provide an exceptional opportunity to work closely with academia and industry at the intersection of fundamental research into optimisation and air traffic flow planning and management.
The successful person will have:
– A PhD in an engineering, computer science, applied mathematics or a related discipline.
– Good communication skills and be a team player.
– Expert knowledge of state-of-the-art motion planning or scheduling algorithms.
– Expert knowledge in one or more of the following fields: numerical optimisation, graph search algorithms, aircraft performance and/or multi-robot motion planning.
– Sound knowledge of algorithm complexity, scaling and performance.
– Experience in software development in one or more of the following languages: C++, Python and/or Bash.

For more information on how to apply for this position, please go to http://sydney.edu.au/recruitment/ and search with reference number 1478/0916A

CLOSING DATE: 20 January 2017 (11.30pm Sydney time)

6.15. Research Fellow: University of Melbourne, Australia

Contributed by: Peter Dower, pdower@unimelb.edu.au

Research Fellow: University of Melbourne, Australia.

A research fellow with a solid background in applied mathematics (or equivalent) is sought to conduct mathematical systems theory research in the area of optimal control for continuous time nonlinear dynamical systems, with an emphasis on the development of new theory and computationally efficient methods arising from min/max plus analysis of dynamic programming. Initial appointment is for one year, with a possible extension to two years.

Closing date for applications: 29 January 2017.

All application / submission details: Search jobs.unimelb.edu.au for "0042275" or "optimal control".

6.16. Research Fellow: Nanyang Technological University, Singapore

Contributed by: Rong Su, rsu@ntu.edu.sg

Research Associate/Fellow position available at Nanyang Technological University

One candidate for a research fellow or research associate position is sought for an NRF NTU-Delta Corporate Lab project on Hierarchical Modelling and Real-time Operation Planning for Low Volume High Mix Reconfigurable Manufacturing, which has started since July 1, 2016. The candidate will work on discrete-event based system modeling and analysis for low volume high mix (LVHM) operations, and is expected to possess a master or PhD degree in electrical engineering, systems engineering, computer science or software engineering with substantial experience in discrete-event modeling, simulation and analysis. The salary is competitive including a base salary and an annual performance bonus, proportional to the candidate’s research experience. The first contract is for one year, and can be renewed up to three years. An interested candidate may send his/her CV, a list of publications with relevant journal impact factors, and a list of at least two references to me via my email address at rsu@ntu.edu.sg.

Application Procedure:
Interested candidates please send your application materials to:
Prof Rong Su
S1-B1b-59, School of Electrical & Electronic Engineering
6.17. Research Fellow: Nanyang Technological University, Singapore
Contributed by: Rong Su, rsu@ntu.edu.sg

Research Fellow positions available at Nanyang Technological University

Position 1: A candidate for a Research Fellow position is sought, who will be placed in a project on Distributed Adaptive Urban Traffic Signal Control based on V2X Information Infrastructure, which has started in May 2015, and will last for four years. The candidate is expected to have a PhD degree in the areas of electrical engineering, mechanical engineering, systems engineering, or applied mathematics with a strong background in modelling of complex systems, optimization and control of a large-scale system. Past experience in urban traffic signal control and software simulation (via tools such as VISSIM) of large-scale networks will be a plus. The candidate is expected to undertake research on modelling a large urban traffic network, and develop computationally efficient traffic light scheduling algorithms within a V2X infrastructure.

Position 2: A candidate for a Research Fellow position is sought, who will be placed in a project on Air Traffic Flow Management. The candidate is expected to have a PhD degree in the areas of electrical engineering, mechanical engineering, systems engineering, or applied mathematics with a strong background in modelling of complex systems, optimization and control of a large-scale system. Past experience in (air) traffic management and control will be a plus. The candidate is expected to undertake research on modelling a large air traffic flow network, and developing computationally efficient flight routing and scheduling algorithms, which can be either easily fit in the current ATFM framework, or implementable in a ground breaking new flow management framework that is technologically feasible within 5-10 years.

The salary is competitive including a base salary and an annual performance bonus, and proportional to the candidate’s research experience. The first contract is for one year, and can be renewed up to the end of the project.

Application Procedure:
An interested applicant may send his/her CV, a list of publications with relevant journal impact factors, a clear indication of the position to apply for, and a list of at least two references to Prof Rong Su at the following contact address:

Prof Rong Su
S1-B1b-59
School of Electrical & Electronic Engineering
Nanyang Technological University
50 Nanyang Avenue, Singapore 639798
e-mail: rsu@ntu.edu.sg

Electronic submission of application is highly encouraged. Only shortlisted candidates will be notified for interview.
6.18. Faculty: Zhejiang University of Technology, China
Contributed by: Xiang Qiu, qiuxiang@zjut.edu.cn

Faculty Position: Zhejiang University of Technology, Hangzhou, China
Contributed by: Xiang Qiu, qiuxiang@zjut.edu.cn

http://www.auto.zjut.edu.cn/WebSite/Job/JobList.aspx

Zhejiang Control Science and Engineering First-Class (Class A) Discipline Recruitment Announcement

Zhejiang University of Technology (ZJUT), sitting by the beautiful West Lake, Hangzhou, is a Zhejiang Province and the Ministry of Education co-supported, provincially governed key university, who owns one of the only 14 Collaborative Creation Centers in the first initiative of the state “2011 Program”. ZJUT has its beautiful campus covering more than 3000 mu, which accommodates 24 Colleges, more than 37,000 full-time students and more than 3,300 staffs. ZJUT is proudly to have 2 self-owned and 2 sharing Fellows of the Chinese Academy of Engineering, as well as more than 1400 faculties with senior professional titles. ZJUT has State Key Disciplines, State Engineering Research Centers, State University Science Parks, Centers for Postdocs, as well as the power of awarding Doctors, Masters, MBAs and recruiting foreign students and those from Hong Kong, Macao and Taiwan.

The Control Science and Engineering Discipline within the College of Information Engineering was one of the Priority-among-Priorities Disciplines (selected by Zhejiang Provincial Government in 2009), and is now one of the Zhejiang First-Class (Class A) Disciplines in the first initiative of the Program in 2015. The Discipline now has the Doctoral Program at the first-level discipline, the Center for Postdocs, and the Zhejiang Collaborated Key Laboratory of Embedded Systems. The College of Information Engineering where the Discipline is in has 5 undergraduate programs: Automation, Electrical Engineering and Its Automation, Electronic Information Engineering, Communication Engineering, and Electronic Science and Technology. The Discipline is now recruiting faculties in the following areas at the levels of State and Zhejiang Provincial “1000 Plan” high-level talents, Zhejiang “Qianjiang Scholars”, ZJUT “Yunhe Specially-Appointed Professors”, “ZJUT Professors” outstanding PhDs and postdocs, etc.

(1) Control Science and Engineering, including advanced control theory, robotics, machine vision, pattern recognition, industrial networked control systems, MES, etc.
(2) Electrical Engineering, including electric drive, power electronics, new energy, etc.
(3) Mechatronic Engineering, including high-precision servo control of mechatronic devices, the modelling and dynamic analysis of robots, etc.
(4) Computer Science and Technology, including smart city, smart healthcare, big data, cloud computing, IoT, industrial control software, etc.

A. Selection criteria

High-level talents (Changjiang Scholars, 1000 Plan Scholars, Qianjiang Scholars, etc.) You have major achievements and influence in your research area that have already been recognized by national and international researchers, or have great potentials of future development; You also meet the criteria of corresponding talents programs.

ZJUT Professors /Associate Professors You have a PhD degree obtained from a recognized university or research institutes with at least one year of oversea research experience in a well-known foreign institute; You have research achievements recognized by national and international researchers; Your application also passes the review process at the university level (ZJUT).

Outstanding PhDs/Postdocs You have a PhD degree obtained from a recognized university or research institute; You have high-quality research outputs and the professional skills required by a university lecturer, and great potentials of your future career.
B. Salary and welfare

(1) National-Level Top Tier Talents: Fellows of Chinese Academy of Sciences or Chinese Academy of Engineering, “Special Support Program” Distinguished Talents, Principal Investigators of NSFC Innovative Research Team, or other talents at the equivalent level. Treatment: Negotiation on the case by case basis.

(2) National-Level Top Tier Talents: National: “1000 Plan” Scholars (long-term), Changqiang Scholars, NSFC Distinguished Young Scholars, “Special Support Program” Outstanding Talents, winners (rank first) of three major national science awards, or other talents at the equivalent level. Salary (CNY): ≥700K /Year; Housing Benefit (CNY): 3M-5M; Startup Funds (CNY): Case by case.

(3) National-Level Young Talents: “Special Support Program” Outstanding Young Talents, “1000 Plan” Young Scholars, “Changjiang Young Scholars, NSFC Outstanding Young Scholars, 973 Program Young Scholars, “Millions of Talents Program” Scholars, or other talents at the equivalent level. Salary (CNY): ≥450K /Year; Housing Benefit (CNY): 1.5M-2.5M; Startup Funds (CNY): 1M-3M.

(4) Provincial-and-Ministry-Level Talents, Yunhe Specially-Appointed Professors: CAS “100 Plan” Scholars, Zhejiang "Qianjiang Scholars", Zhejiang “1000 Plan” (long-term) Scholars, or other talents who have made significant academic contributions with great potentials of development and who are awarded “Yunhe Specially-Appointed Professors” after the review of ZJUT. Salary (CNY): ≥350K /Year; Housing Benefit (CNY): 1.5M; Startup Funds (CNY): 0.5M-1M.

(5) ZJUT Professors, ZJUT Associated Professors: You have a PhD degree obtained from a recognized university or research institutes with at least one year of oversea research experience in a well-known foreign institute; You have research achievements recognized by national and international colleges; Your application also passes the review process at the university level. Salary (CNY): Salaries at the appropriate levels; Housing Benefit (CNY): 0.4M-0.5M; Startup Funds (CNY): 0.1M-0.2M.

(6) Outstanding PhDs/Postdoctors: You have a PhD degree obtained from a recognized university or research institute; You have high-quality research outputs and the professional skills required by a university lecturer, and great potentials of your future career. Salary (CNY): Salaries at the appropriate levels; Housing Benefit (CNY): 0.3M.

(7) Postdocs (leading to a faculty): Besides the basic salary and welfare, 50K/Year subsidy is provided for the first two years, with the possibility of continuing this subsidy plus a one-off 200K housing benefit if you are accepted to ZJUT public institution business unit.

C. Required documents

(1) One self-recommendation letter covering your study and professional records, your teaching and research statements, your achievements, your work plan as well as your possible requirements from us.

(2) A list of your research funds, awards, and publications in the recent five years.

D. Contact us

Dr. Qiu,
Email: qiuxiang@zjut.edu.cn
Mobile: +86-13867469319
Address: Xiaoheshan College Park, College of Information Engineering, Zhejiang University of Technology, 310023

Zhejiang Control Science and Engineering First-Class (Class A) Discipline
Dec 02, 2016
6.19. Faculty: University of Twente, The Netherlands  
Contributed by: Hans Zwart, h.j.zwart@utwente.nl

Assistant Professor in Complex Systems at the Department of Applied Mathematics, University of Twente
The University of Twente (UT) is seeking a researcher with an outstanding record in Mathematics and its
applications in Science and Engineering for a Faculty position in Scientific Computing within the Department
of Applied Mathematics. More information can be found:
https://www.utwente.nl/en/organization/careers/vacancies/!/vacature/868023

6.20. Faculty: Shanghai Jiaotong University, China  
Contributed by: Weidong Zhang, wdzhang@sjtu.edu.cn

Faculty Position in Shanghai Jiaotong University, China
The Optimization & Control Engineering Research Center of Shanghai (in the Department of Automation,
Shanghai Jiaotong University, China) invites applicants for two full-time research positions in control en-
gineering as soon as possible thereafter. The center seeks individuals with exceptional promise for, or a
proven record of, excellence in theory or application research. We are interested in candidates in the broad
areas of advanced control theory, multi-agents formation, machine learning, pattern recognition, industrial
networked control systems, etc.
Requirements and qualifications:
- PhD degree
- Documented experience with research dissemination in international scientific journals
- Experience with writing research applications
- Good communication skills in English or Chinese
- Self-motivation and the ability to work both independently and as a team player with researchers from
different disciplines
Main tasks:
- Active involvement in research efforts
- Supervision of student projects and thesis at both master and Ph.D levels
Salary and others:
- RMB 200k/year (approximately, 30kUSD)
- It is a 5-N year position, depending on working performance
- Applications will be assessed by an expert committee
Required documents
- One self-recommendation letter covering your research statements, your achievements, as well as your pos-
sible requirements from us
- A list of your publications
For further information on these job offers, please contact Prof. Dr. Weidong Zhang, Email: wdzhang@sjtu.edu.cn,
tel: +86-21-34204019. Address: Dongchuan Road 800, Shanghai Jiaotong University, Shanghai 200240,
China.
Faculty Position in Shanghai Jiaotong University, China

The Engineer Research Center of Marine Automation, Shanghai Municipal Education Commission (in the Department of Automation, Shanghai Jiaotong University, China) invites applicants for two full-time research positions in control engineering as soon as possible thereafter. The center seeks individuals with exceptional promise for, or a proven record of, excellence in theory or application research. We are interested in candidates in the broad areas of control engineering, ocean engineering, marine engineering, unmanned autonomous systems, etc.

Requirements and qualifications:
- PhD degree
- Documented experience with research dissemination in international scientific journals
- Experience with writing research applications
- Good communication skills in English or Chinese
- Self-motivation and the ability to work both independently and as a team player with researchers from different disciplines

Main tasks:
- Active involvement in research efforts
- Supervision of student projects and thesis at both master and Ph.D levels

Salary and others:
- RMB 200k/year (approximately, 30kUSD)
- It is a 5-N year position, depending on working performance
- Applications will be assessed by an expert committee

Required documents
- One self-recommendation letter covering your research statements, your achievements, as well as your possible requirements from us
- A list of your publications

For further information on these job offers, please contact Prof. Dr. Weidong Zhang, Email: wdzhang@sjtu.edu.cn, tel: +86-21-34204019. Address: Dongchuan Road 800, Shanghai Jiaotong University, Shsnghai 200240, China.

6.22. Faculty: Rensselaer Polytechnic Institute, USA
Contributed by: Agung Julius, agung@ecse.rpi.edu

TENURE TRACK FACULTY OPENING
Department of Electrical, Computer, and Systems Engineering
Rensselaer Polytechnic Institute, Troy, NY

The Department of Electrical, Computer and Systems Engineering at Rensselaer Polytechnic Institute (RPI) in Troy, NY, seeks an outstanding faculty candidate for a full-time tenure-track position at the Assistant or Associate Professor level. The candidate must have earned a Ph.D. (or foreign degree equivalent) in Electrical Engineering or a closely related Science/Engineering field with research emphasis in electric power and energy systems. Research expertise can be in systems or any sub-area such as wide band-gap power devices, advanced power electronics, advanced electrical drives and transportation systems, advanced power system modeling and control, and smart grid and distribution system engineering.

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Candidates for Associate Professor must have at least six years of experience; a proven record in attracting funding and conducting outstanding research; a strong commitment to education; evidence of effective teaching, and possess academic credentials to qualify for a tenured faculty appointment at Rensselaer. Industrial experience is desirable but not necessary. Candidates at the Associate Professor level will be considered for a concurrent position as Associate Director of the New York State Center for Future Energy Systems (CFES) currently re-designated by NY State for another 10 years of funding. At either level, candidates will be expected to teach assigned graduate and/or undergraduate courses; to establish and maintain a robust program of sponsored research, and to serve the department and school administratively and academically.

Electric Power and Energy Engineering at Rensselaer is one of the oldest and most productive programs in the country. It is aligned with the Institute priority of Energy, Environment, and Smart Systems. In addition to individual research contracts, Rensselaer maintains two major research centers in electric power and energy: the NSF/DoE Center for Ultra-Wide-Area Resilient Electric Energy Transmission Networks (CURENT) and the NYSTAR Center for Future Energy Systems (CFES). ECSE faculty members have access to world-class research facilities and an atmosphere that promotes interdisciplinary collaboration. The Center for Computational Innovation (CCI) has one of the fastest supercomputers available at a private university.

Founded in 1824, Rensselaer is the first technological university in the English-speaking world. It is a private research university located in historic Troy, New York, which is part of the greater capital region of New York that includes Albany, the capital as well as Saratoga Springs and Schenectady.

Applications will be accepted until the position is filled. The anticipated start date is August 16, 2017. Applicants must send a cover letter, complete CV, a statement of research accomplishments and goals, a description of teaching interests, and contact information for a minimum of four professional references. Please send material in a single PDF document to employment@ecse.rpi.edu subject line: ECSE Faculty Position. We also request that you complete the voluntary confidential summary information form for Human Resources, found on our website https://www.ecse.rpi.edu/ (under Employment).

6.23. Faculty: Ohio State University, USA
Contributed by: Wei Zhang, zhang.491@osu.edu

Faculty Positions in Electrical and Computer Engineering
Ohio State University, Columbus, Ohio

The Ohio State University invites applications for multiple tenure track faculty positions in the Department of Electrical and Computer Engineering. All areas and ranks will be considered. We are especially interested in (i) robotics, including human/robot interactions, (ii) mobile health sensing and health analytics, (iii) both junior and senior faculty in cybersecurity (including hardware-enabled cybersecurity and mobility, (iv) electric machines and variable frequency drive systems, and (v) Director of the ElectroScience Laboratory (ESL) at OSU.

For the robotics position, a successful candidate should have substantial research experience in the general field of robotics for both fundamentals and applications. Interested areas include but are not limited to intelligent robots, human/robot interactions, mobile robots, industrial robots for modern manufacturing automation, and service robots for civilian and defense applications. Details of other positions can be found at https://ece.osu.edu/about/employment

All positions may involve joint appointments with other engineering departments. Applicants must have a Ph.D. and outstanding academic credentials. Successful candidates are expected to develop a vigorous
externally funded research program, show excellence and leadership in academic and scholarly activities, and demonstrate outstanding teaching at the undergraduate and graduate levels.

Some of these positions are partially funded by Ohio State’s Discovery Themes Initiative, a significant faculty hiring investment in key thematic areas that build on the university’s culture of academic collaboration to make a global impact. The Ohio State University is committed to establishing a culturally and intellectually diverse environment, encouraging all members of our learning community to reach their full potential. We are responsive to dual-career families and strongly promote work-life balance to support our community members through a suite of institutionalized policies. We are an NSF Advance Institution and a member of the Ohio/Western Pennsylvania/West Virginia Higher Education Recruitment Consortium.

Applicants are requested to send, in this numbered order: 1) a letter of application (2) curriculum vitae, (3) statement of research plans, (4) brief statement of teaching philosophy, (5) name, address, and email addresses of four references, to Professor John L. Volakis at eng-ece-search@osu.edu

6.24. Faculty: Delft University of Technology, The Netherlands

Contributed by: Bart De Schutter, b.deschutter@tudelft.nl

Professor positions at all levels at the Delft Center for Systems and Control (DCSC)

The Delft Center for Systems and Control (DCSC) of Delft University of Technology in Delft, The Netherlands is aiming to strengthen, expand, and renew its international competences through new strategic recruitments sponsored by the Executive Board of the Delft University of Technology. We are looking for excellent candidates with a proven track record of ground-breaking scientific research, a challenging and innovative research program, and a commitment to higher education.

We are offering several faculty positions at various entry levels (assistant, associate, full professor) in the following areas to complement existing research efforts at the department:

Within the Numerics for Control & Identification team:
* Randomization and optimization for systems and control
* Identification and control of spatial-temporal dynamical systems based on insights from machine learning, rank approximation, etc.
* Nonlinear systems

Potential application areas of interest include: Quantum control, Imaging systems and Smart optics, Optical computing and Bio and Life-sciences

Within the Hybrid, Adaptive & Nonlinear Systems team:
* Human-in-the-loop control
* Big data methods for systems and control
* Control of nonlinear time-delay systems

Within the Data-Driven Control & Integrated System Design team:
* Fault-tolerant control
* Robust control
* Systems engineering

Potential application areas of interest include: Large-scale mechatronic systems, Dynamic positioning systems, Ocean-energy-harvesting systems, and Wind-energy-harvesting systems.

Within the Networked Cyber-Physical Systems team:
* Multi-agent and mixed human-machine decision networks, games on networks
Tenure-track Assistant Professor in School of EEE at Nanyang Technological University, Singapore

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

Young and research-intensive, Nanyang Technological University (NTU Singapore) is ranked 13th globally. NTU is also placed 1st amongst the world’s best young universities. NTU is also placed 1st amongst the world’s best young universities. The School of Electrical and Electronic Engineering (EEE) at NTU Singapore is one of the largest EEE schools in the world and ranks 8th in the field of Electrical & Electronic Engineering in the 2016 QS World University Rankings by Subjects.

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 research. With more than 150 faculty members and an enrolment of more than 4,000, of which about 1,000 are graduate students.

The School of EEE is seeking applications for a tenure-track Assistant Professor position in the field of Power Engineering.

Applicants should possess the following qualification and attributes:

- A Ph.D. degree in Electrical Engineering or in relevant discipline, with an outstanding scholarship record and a strong commitment to excellence in research and teaching;
- Strong background in power engineering, preferably have experience in one of the following areas:
  1) Power system analysis, control, planning, design and protection,
  2) Power generation, transmission and distribution,
  3) Electrical and/or smart grids,
  4) Power electronics and drive systems,
  5) Electric machines and electrical propulsion,
  6) Energy conversion and energy systems,
  7) Electrical energy storage systems;
  8) Energy management and control systems
- Ability to contribute towards strategic research focus in sustainable electrical power and energy systems.
- Preferences are given to candidates with relevant postdoctoral or working/teaching experience in top research institutions or universities but outstanding fresh Ph.D. graduates would also be considered.

Emoluments and General Terms and Conditions of Service:
Salary will be competitive and will commensurate with qualifications and experience. The University offers a comprehensive fringe benefit package.

Apart from the attractive remuneration package, each successful candidate will also receive a start-up package of at least S$300,000 comprising S$100,000 (for equipment, manpower, travel etc) and about S$200,000 scholarship to fund a graduate student (PhD) for 4 years.
Join the SCHOOL OF EEE http://www.eee.ntu.edu.sg as a faculty member and embark on a challenging and exciting career in research innovations and discoveries and teaching excellence, so as to prepare engineering leaders of the future.

Application Procedure:

IMPORTANT – Please indicate clearly the post applied for (i.e. Tenure-track Assistant in Power Engineering), when submitting an application or inquiring about this job announcement.

The ”Guidelines for Submitting an Application for Faculty Appointment” is available at: http://www.ntu.edu.sg/ohr/career/submit-an-application/Pages/Faculty-Positions.aspx

Please ensure that all requested information is enclosed in your application and send via email to Chairman, School Search Committee (Area) c/o School of Electrical & Electronic Engineering (eeehr@ntu.edu.sg)

Electronic submission of applications is encouraged. Only short-listed candidates will be notified.

Position Start Date: Available Immediately
Closing Date: Until Position Filled

6.26. Faculty: Washington University in St. Louis, USA
Contributed by: Hiro Mukai, facsearch@ese.wustl.edu

Tenured/Tenure-Track Faculty
Washington University in St. Louis
Electrical and Systems Engineering

The Preston M. Green Department of Electrical & Systems Engineering at Washington University in St. Louis invites applications for faculty positions at all levels, for fall 2017. The Electrical & Systems Engineering department enjoys a new building, Preston M. Green Hall, with state-of-the-art facilities. Candidates should be exceptionally strong, possess novel and creative visions of research, and commit gladly to teaching at both the undergraduate and graduate levels. They should have an earned doctorate in Electrical Engineering, Computer Science, Applied Physics, Systems Engineering, Mathematics, Statistics, Operations Research or related fields.

Technical areas of interest include, but are not limited to, applied physics, integrated circuits, nano devices, device packaging, imaging, signal processing, cyber-physical systems, control systems, operations research, optimization, applied mathematics, and applied statistics. Applications include biomedicine, robotics, financial engineering, and modeling of physical and complex systems. Successful candidates are expected to conduct high-quality research and teaching, publish in peer-reviewed journals, and participate in department and university service.

Applications will be accepted immediately, and interviews will begin after January 1, 2017. The details of the application process and necessary documents are found at the following site: http://ese.wustl.edu/aboutthedepartment/Pages/faculty-openings.aspx

Washington University in St. Louis is a medium-size private university, which is 19th in the national university ranking and 14th in the undergraduate teaching ranking, both according to the U.S. News & World Report.