Contents

1. IEEE CSS Headlines
   1.1 IEEE Control Systems Society Publications Content Digest
   1.2 IEEE Control Systems Society Technically Cosponsored Conferences
   1.3 First IEEE Conference on Control Technology and Applications

2. MISC
   2.1 Robotarium - A Remotely Accessible Swarm-Robotics Testbed
   2.2 Focus Period on Large-Scale and Distributed Optimization at Lund University

3. Books
   3.1 Process Control System Fault Diagnosis: A Bayesian Approach

4. Journals
   4.1 Contents: Automatica
   4.2 Contents: Control Engineering Practice
   4.3 Contents: Asian Journal of Control
   4.4 Contents: Advanced Mathematical Models and Application
   4.5 Contents: Control Theory and Technology
   4.6 Contents: International Journal of Control, Automation, and Systems
   4.7 Contents: International Journal of Control
   4.8 CFP: Control Theory and Technology
   4.9 CFP: Journal of Process Control
   4.10 CFP: Journal of Control and Decision

5. Conferences
   5.1 International Conference on Unmanned Aircraft Systems
   5.2 International Conference on Information Fusion
   5.3 International Carpathian Control Conference
   5.4 International Conference on Control, Automation and Systems
   5.5 Chinese Control and Decision Conference
   5.6 Mediterranean Conference on Control and Automation
5.7 IEEE Colombian Conference on Automatic Control
5.8 IEEE International Conference on Automation Science and Engineering
5.9 IEEE International Conference on Fuzzy Systems: Special Sessions
5.10 IEEE International Conference on Fuzzy Systems: Tutorial

6. Positions
6.1 PhD: Australian National University, Australia
6.2 PhD: CNRS Grenoble, France
6.3 PhD: Instituto Politécnico Nacional, Mexico
6.4 PhD: Brose Fahrzeugteile GmbH, Germany
6.5 PhD: Chalmers University, Sweden
6.6 PhD/PostDoc: University of Pennsylvania, USA
6.7 PhD/PostDoc: University of Pennsylvania, USA
6.8 PostDoc: Missouri University of Science & Technology, USA
6.9 PostDoc: University of Michigan, USA
6.10 PostDoc: Zhejiang University, China
6.11 PostDoc: University of California at Berkeley, USA
6.12 PostDoc: Université de Lorraine, France
6.13 PostDoc: NC A&T State University, USA
6.14 PostDoc: GIPSA-lab, France
6.15 PostDoc: KTH, Sweden
6.16 PostDoc: Chalmers University, Sweden
6.17 Research Associate: Nanyang Technological University, Singapore
6.18 Research Associate: University of Newcastle, Australia
6.19 Lecturer: Paderborn University, Germany
6.20 Faculty: Ohio State University, USA
6.21 Faculty: University of California at Santa Cruz, USA
6.22 Faculty: University of California at Santa Cruz, USA
6.23 Faculty: Louisiana State University, USA
6.24 Faculty: Louisiana State University, USA
6.25 Faculty: Loughborough University, UK
6.26 Faculty: Washington University in St. Louis, USA
6.27 Faculty: University of Texas at Dallas, USA
6.28 Faculty: University of Connecticut, USA
6.29 Faculty: University of California at Berkeley, USA
6.30 Faculty: University of Groningen, Netherland
6.31 Faculty: KU Leuven, Belgium
6.32 Faculty: University of Houston, USA
6.33 Faculty: University of Minnesota, USA
6.34 Engineer: Intel, USA
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 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

1.3. First IEEE Conference on Control Technology and Applications
Contributed by: Stephen Yurkovich, steve.yurkovich@utdallas.edu

IEEE CCTA 2017
1st IEEE Conference on Control Technology and Applications
August 27-30, 2017
The Mauna Lani Bay Hotel and Bungalows
Kohala Coast, Hawaii
Please visit: ccta2017.ieeecss.org

The inaugural 2017 IEEE Conference on Control Technology and Applications will be held on the beautiful Big Island of Hawaii. This new conference, sponsored by the IEEE Control Systems Society with technical
co-sponsorship through the IEEE Robotics and Automation Society, and organized in cooperation with the Society for Instrument and Control Engineers (SICE).

This new conference follows in the evolution of the former IEEE CCA to recent successful MSC venues, the last of which was held in 2016. The CCTA 2017 technical program will feature the presentation of contributed and invited papers, as well as tutorial sessions and workshops, focusing on technological advances and applications of control engineering. This focus includes all aspects of control engineering for practical control systems, from analysis and design, through simulation and hardware.

Major themes of energy, healthcare, manufacturing, and transportation will feature applications of control technology for robotic, automotive, biomechanical, aerospace, power and energy systems, control of networks, and many others.

CCTA 2017 will be held at the Mauna Lani Bay Hotel and Bungalows on the Big Island of Hawaii. The venue is a medium-sized, serene property on the west Kohala Coast, and the organizers have negotiated reasonable room rates which include all resort amenities. The Big Island of Hawai‘i offers an abundance of natural beauty and sites, with 11 of the world’s 13 climate zones. With a land mass of nearly twice the size of all other Hawaiian Islands combined, but with only a small fraction of the state’s population, its diverse terrain spans green and black sand beaches to lush rainforests and waterfalls, and two active volcanoes within Volcanoes National Park.

Call for Contributed Papers: Papers are invited in the form of regular manuscripts. Papers must conform to the submission policy, described below, requiring that all manuscripts be in 2-column format and meet strict page limits.

Important Dates:
- Deadline for submission of Invited Session proposals: March 1, 2017
- Deadline for submission of contributed and invited papers: March 1, 2017
- Notification of acceptance/rejection, on-line registration opens: June 1, 2017
- Deadline for final submission of all papers: July 1, 2017

For more information on the venue and paper submission, please visit ccta2017.ieeecss.org

2. MISC

2.1. Robotarium - A Remotely Accessible Swarm-Robotics Testbed

Contributed by: Magnus Egerstedt, magnus@robotics.gatech.edu

The Robotarium - A Remotely Accessible Swarm-Robotics Testbed

In multi-agent robotics, the gap between algorithmic development and actual deployment of teams of robots is both large and costly, making accessibility a problem. To remedy this, the Institute for Robotics and Intelligent machines at Georgia Tech has developed the Robotarium - a remotely accessible swarm robotics...
lab where researchers in areas such as swarm robotics, distributed and coordinated control, and decision making in social, biological systems, can upload their control programs to the Robotarium website (www.robotarium.org) and run customized experiments on teams of mobile robots.

The Robotarium is now open for business, and interested researchers are encouraged to visit www.robotarium.org or contact Magnus Egerstedt (magnus@robotics.gatech.edu) or Daniel Pickem (daniel.pickem@gatech.edu) for more information.

More About the Robotarium

Currently, up to 20 miniature wheeled ground robots are available in the Robotarium for remote experimentation. Users can prototype their code in the provided Matlab simulator and submit the exact same code for execution on the Robotarium through the Robotarium web portal. Following the successful execution of an experiment, a video as well as the robots’ state and input data can be accessed through the user’s account. Experiment execution is completely automated and relies on the Robotarium’s built-in collision avoidance, autonomous recharging, as well as convenience tools to simplify robotic experimentation.

The Robotarium uses an overhead camera system to track all robots and provide global pose data through a Matlab API while robots are controlled through linear and angular velocity inputs. The robots are equipped with a WiFi communication link and capable of operating up to 40 minutes on a single battery charge. However, an autonomous wireless charging mechanism enables their continuous long-term operation.

2.2. Focus Period on Large-Scale and Distributed Optimization at Lund University

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

The LCCC Linnaeus center - Lund Center for Control of Complex engineering systems is announcing a Focus Period on Large-Scale and Distributed Optimization from May 29 to June 30, 2017 with a workshop in the middle.

The aim of this focus period is to bring together leading researchers from different communities to create exciting cross-fertilization and new ideas.

At any particular time, there will be room for up to 10 invited researchers. A typical visit will be 3-5 weeks. Interested visitors are encouraged to contact Pontus Giselsson (pontusg@control.lth.se) or Anders Rantzer (rantzer@control.lth.se).


3. Books

3.1. Process Control System Fault Diagnosis: A Bayesian Approach

Contributed by: Biao Huang, biao.huang@ualberta.ca

ISBN: 978-1-118-77061-0

Ruben T. Gonzalez, Fei Qi, Biao Huang,
University of Alberta, Canada

A typical modern process system consists of hundreds of control loops, which are overwhelming for plant personnel to monitor. The main objectives of this book are to establish a new framework for control system
fault diagnosis, to synthesize observations of different monitors with a prior knowledge, and to pinpoint possible abnormal sources on the basis of Bayesian theory.

The book consolidates results developed by the authors, along with the fundamentals, and presents them in a systematic way. It provides a comprehensive coverage of various Bayesian methods for control system fault diagnosis, along with a detailed tutorial. The book is useful for graduate students and researchers as a monograph and as a reference for state-of-the-art techniques in control system performance monitoring and fault diagnosis. Since several self-contained practical examples are included in the book, it also provides a place for practicing engineers to look for solutions to their daily monitoring and diagnosis problems.

Key features:
- A comprehensive coverage of Bayesian Inference for control system fault diagnosis.
- Theory and applications are self-contained.
- Provides detailed algorithms and sample Matlab codes.
- Theory is illustrated through benchmark simulation examples, pilot-scale experiments and industrial application.

4. Journals

4.1. Contents: Automatica

Contributed by: Elisa Capello, automatica@polito.it

Table of Contents
Automatica
Vol. 74, December 2016
http://www.sciencedirect.com/science/journal/00051098/74

- Xiangyu Wang, Shihua Li, James Lam, “Distributed active anti-disturbance output consensus algorithms for higher-order multi-agent systems with mismatched disturbances”, pages 30-37.
- Swann Marx, Vincent Andrieu, Christophe Prieur, “Semi-global stabilization by an output feedback law from a hybrid state controller”, pages 90-98.
- Johannes Schiffer, Daniele Zonetti, Romeo Ortega, Aleksandar M. Stanković, Tevfik Sezi, Jörg Raisch, “A survey on modeling of microgrids—From fundamental physics to phasors and voltage sources”, pages 135-150.
- Florian A. Bayer, Matthias Lorenzen, Matthias A. Müller, Frank Allgöwer, “Robust economic Model Predictive Control using stochastic information”, pages 151-161.
- Ashish Cherukuri, Jorge Cortés, “Initialization-free distributed coordination for economic dispatch under varying loads and generator commitment”, pages 183-193.
- Ziyue Ma, Zhiwu Li, Alessandro Giua, “Petri net controllers for Generalized Mutual Exclusion Constraints with floor operators”, pages 238-246.
- Peng Yi, Yiguang Hong, Feng Liu, “Initialization-free distributed algorithms for optimal resource allocation with feasibility constraints and application to economic dispatch of power systems”, pages 259-269.
- Haichao Gui, George Vukovich, “Finite-time output-feedback position and attitude tracking of a rigid body”, pages 270-278.
- Yuezu Lv, Zhongkui Li, Zhisheng Duan, Jie Chen, “Distributed adaptive output feedback consensus protocols for linear systems on directed graphs with a leader of bounded input”, pages 308-314.

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

Control Engineering Practice
Volume 57
December 2016
- Ajaya Kumar Pani, Hare Krishna Mohanta, Online monitoring of cement clinker quality using multivariate statistics and Takagi-Sugeno fuzzy-inference technique, Pages 1-17
- Martin Forstinger, Robert Bauer, Anton Hofer, Wilfried Rosseger, Multivariable control of a test bed for differential gears, Pages 18-28
- Sanja Vujnovic, Zeljko Djurovic, Goran Kvascev, Fan mill state estimation based on acoustic signature analysis, Pages 29-38
- Norbert Zsiga, Stijn van Dooren, Philipp Elbert, Christopher H. Onder, A new method for analysis and design of iterative learning control algorithms in the time-domain, Pages 39-49
- Mario Pereira, David Muñoz de la Peña, Daniel Limon, Ignacio Alvarado, Teodoro Alamo, Application to a drinking water network of robust periodic MPC, Pages 50-60
- Tianyou Chai, Yao Jia, Haibo Li, Hong Wang, An intelligent switching control for a mixed separation thickener process, Pages 61-71
- PS Saikrishna, Ramkrishna Pasumarthy, Multi-objective switching controller for cloud computing systems, Pages 72-83
- Nikolce Murgovski, Bo Egardt, Magnus Nilsson, Cooperative energy management of automated vehicles, Pages 84-98
- Sandro Nüesch, Anna G. Stefanopoulou, Multimode combustion in a mild hybrid electric vehicle. Part 1: Supervisory control, Pages 99-110
- Lei Xie, Xing Cai, Junghui Chen, Hongye Su, GA based decomposition of large scale distributed model predictive control systems, Pages 111-125
- Peng Lu, Erik-Jan van Kampen, Cornelis de Visser, Qiping Chu, Aircraft fault-tolerant trajectory control using Incremental Nonlinear Dynamic Inversion, Pages 126-141
- Herschel C. Pangborn, Andrew G. Alleyne, Switched linear control for refrigerant superheat recovery in vapor compression systems, Pages 142-156
- Stefan Krebs, Christoph Schnurr, Martin Pfeifer, Jörg Weigold, Sören Holmann, Reduced-order hybrid interval observer for verified state estimation of an induction machine, Pages 157-168
- Stefan Krebs, Christoph Schnurr, Martin Pfeifer, Jörg Weigold, Sören Holmann, Reduced-order hybrid interval observer for verified state estimation of an induction machine, Pages 157-168

4.3. Contents: Asian Journal of Control
Contributed by: Lichen Fu, lichen@ntu.edu.tw

Asian Journal of Control
Vol.18, No.6 November, 2016
CONTENTS

[Invited Paper]
Authors: Kiran S. Sajjanshetty and Michael G. Safonov

[Regular Paper]
Authors: R. Morita, T. Wada, I. Masubuchi, T. Asai and Y. Fujisaki
Authors: Chenda Liao and Prabir Barooah
Authors: M. Kissaooui, A. Abouloïfa, Y. Abouelmajjoub, F. Z. Chaoui and F. Giri
Authors: Molsen Rezaee and Saeed Seyedtabaai
5. Paper Title: Graph-Based Dwell Time Computation Methods for Discrete-Time Switched Linear Systems (pages 2018–2026)
Authors: Ferruh İlhan and Özkan Karabacak
6. Paper Title: STP Approach to Model Controlled Automata with Application to Reachability Analysis of
7. Paper Title: Decentralized Observer Design for a Class of Nonlinear Uncertain Large Scale Systems with Lumped Perturbations (pages 2037–2046)
Author: Wen-Jeng Liu

8. Paper Title: Boundary and Distributed Control for a Nonlinear Three-Dimensional Euler-Bernoulli Beam Based On Infinite Dimensional Disturbance Observer (pages 2047–2063)
Authors: Tingting Jiang, Jinkun Liu and Wei He

9. Paper Title: Embedded MPC Controller Based on Interior-Point Method with Convergence Depth Control (pages 2064–2077)
Authors: Yi Ding, Zuhua Xu, Jun Zhao, Kexin Wang and Zhijiang Shao

10. Paper Title: Cooperative Tasking for Deterministic Specification Automata (pages 2078–2087)
Authors: Mohammad Karimadini, Hai Lin and Ali Karimoddini

Authors: Ziye Zhang, Chong Lin and Bing Chen

Authors: Reza Dadkhah Tehrani and Alireza Khayatian

13. Paper Title: H∞ Non-Fragile Synchronous Guaranteed Control of Uncertainty Complex Dynamic Network with Time-Varying Delay (pages 2109–2121)
Authors: Yi-ping Luo, Fei Deng, Bi-feng Zhou, Xin Luo and Huan Liu

14. Paper Title: Model Predictive Control of Hybrid Electric Vehicles for Improved Fuel Economy (pages 2122–2135)
Authors: K. Yu, X. Tan, H. Yang, W. Liu, L. Cui and Q. Liang

15. Paper Title: NN-Based Output-Feedback Control for Stochastic Nonlinear Systems with Unknown Control Directions (pages 2136–2145)
Authors: Hui-Fang Min and Na Duan

16. Paper Title: Linear-Quadratic Optimal Control Problem for Partially Observed Forward-Backward Stochastic Differential Equations of Mean-Field Type (pages 2146–2157)
Authors: Heping Ma and Bin Liu

17. Paper Title: New Stabilization of Continuous-Time Delayed Systems Based on Partially Delay-Dependent Controllers (pages 2158–2171)
Authors: Guoliang Wang and Li Liu

18. Paper Title: Hierarchical Control of Linear Systems from the Abstraction Feedback Gain (pages 2172–2179)
Authors: Yang Kailhong and Ji Haibo

19. Paper Title: Robust H∞ Filteriwing and Deconvolution for Continuous Time Delay Systems Based on Game-Theoretic Approach (pages 2180–2192)
Authors: Fuqiang You, Hui Li, Fuli Wang and Shouping Guan

Authors: Majid Ghaniee Zarch, Yousef Alipouri and Javad Poshtan

21. Paper Title: All-Stabilizing Proportional Controllers for First-Order Bi-Proper Systems with Time Delay: An Analytical Derivation (pages 2203–2220)
Authors: Baris Samim Nesimioglu and Mehmet Turan Soylemez

22. Paper Title: Experimental Implementation of New Sliding Mode Control Law applied To a DC–DC
23. Paper Title: Control of Julia Sets in Generalized Alternated System (pages 2234–2243)
Authors: Pei Wang and Shutang Liu

Authors: Xing-Hui Zhang, Kemei Zhang and Xue-Jun Xie

25. Paper Title: Fault-Tolerant Control for Flutter of Airfoil Subject to Input Saturation (pages 2256–2262)
Authors: Mengxiang Luo, Mingzhou Gao and Guoping Cai

26. Paper Title: Trajectory Tracking Control of XY Table Using Sliding Mode Adaptive Control Based on Fast Double Power Reaching Law (pages 2263–2271)
Authors: Haoping Wang, Xuankai Zhao and Yang Tian

27. Paper Title: An Efficient Numerical Solution of Fractional Optimal Control Problems by using the Ritz Method and Bernstein Operational Matrix (pages 2272–2282)
Authors: Ali Nemati, Sohrabali Yousefi, Fahimeh Soltanian and J. Saffar Ardabili

28. Paper Title: Biologically Inspired Control Of A Fleet Of Uavs With Threat Evasion Strategy (pages 2283–2300)
Authors: Sami El Ferik and Olapido Raphael Thompson

29. Paper Title: Augmented Lagrangian Pattern Search Based Multi-Agent Model Predictive Control of Rhine-Meuse Delta (pages 2301–2309)
Authors: Narjes Sharafi and Ali Akbar Safavi

[Brief Paper]
1. Paper Title: Input/Output Decoupling of Square Linear Systems by Dynamic Two-Parameter Stabilizing Control (pages 2310–2316)
Author: René Galindo

2. Paper Title: Robust Finite-Time Control for Linear Time-Varying Delay Systems With Bounded Control (pages 2317–2324)
Authors: P. Niamsup and V. N. Phat

3. Paper Title: Robust Repetitive Control and Disturbance Rejection Based on Two-Dimensional Model and Equivalent-Input-Disturbance Approach (pages 2325–2335)
Authors: Pan Yu, Min Wu, Jinhua She and Qi Lei

4. Paper Title: GM-PHD Filter with State-Dependent Clutter (pages 2336–2342)
Authors: Jinguang Chen, Xiaoshan Qin, Lili Ma, Bingao Xu and Xinjuan Zhu

5. Paper Title: Adaptive Mittag-Leffler Stabilization of a Class of Fractional Order Uncertain Nonlinear Systems (pages 2343–2351)
Authors: Qiao Wang, Jianliang Zhang, Dongsheng Ding and Donglian Qi

Authors: Qingyu Su, Xiaolong Jia and Honghai Liu

7. Paper Title: Eso-Based Adaptive Robust Control of Dual Motor Driving Servo System (pages 2358–2365)
Authors: Xuemei Ren, Dongwu Li, Guofa Sun and Wei Zhao

Back to the contents

4.4. Contents: Advanced Mathematical Models and Application
Contributed by: Urfat Niriyev, jomardpublishing@gmail.com

Advanced Mathematical Models and Application
ISSN 2519-4445
4.5. Contents: Control Theory and Technology
Contributed by: Zou Tiefeng, tfzou@scut.edu.cn

Table of Contents
Control Theory and Technology
(formerly entitled Journal of Control Theory and Applications)
Vol. 14, No. 4, November 2016
ISSN: 2095-6983 CODEN: CTTOAM
http://jcta.alljournals.ac.cn/cta_en/ch/index.aspx
http://www.springer.com/engineering/control/journal/11768
Special issue on control of complex systems
Editorial
- H. Lin, C. Xiang, Q. Ling P.261
- Energy-efficient control of nanosatellites during distributed region formation flying
R. Haghigi, C. K. Pang P.263
- Leader-following consensus for uncertain second-order nonlinear multi-agent systems
W. Liu, J. Huang P.279
- Optimal decentralized control of large scale systems
X. Q. Shi, D. E. Davison, R. Kwong, E. J. Davison P.287
- Performance analysis of a distributed power control algorithm for shared and split spectrum femtocell networks
K. Senel, M. Akar P.314
- Adaptive control of a class of nonlinear time-varying systems with multiple models
K. George, K. Subramanian P.323
- A novel gain design method to improve the consensus performance of output-feedback multi-agent systems
W. Zheng, Q. Ling, H. Lin P.335
- Frequency-domain stability criteria for SISO and MIMO nonlinear feedback systems with constant and variable time-delays
Y. V. Venkatesh P.347
- Conical tank level control using fractional order PID controllers: a simulated and experimental study
C. Jáuregui, M. A. Duarte-Mermoud, R. Oróstica, J. C. Travieso-Torres, O. Beytía P.369
Contributed by: Young Hoon Joo, journal@ijcas.com

International Journal of Control, Automation, and Systems (IJCAS)
ISSN: 1598-6446
http://www.springer.com/engineering/robotics/journal/12555

Table of contents
Vol. 14, No. 6, December 2016

- Design of Feedback Control for Quadrotors Considering Signal Transmission Delays, Stephen K. Armah*, Sun Yi, and Wonchang Choi* 1395-1403
- Closed Loop Trajectory Optimization Based on Reverse Time Tree, Chyon Hae Kim* and Shigeki Sugano 1404-1412
- Positive L1-gain Filter Design for Positive Continuous-time Markovian Jump Systems with Partly Known Transition Rates, Wenhai Qi and Xianwen Gao* 1413-1420
- Sampled-data Based Distributed Convex Optimization with Eventtriggered Communication, Jiayun Liu, Weisheng Chen*, and Hao Dai 1421-1429
- Performance Measure of Switched Control Systems Based on Covariance Tensor Approach, Deng-Yin Jiang* and Li-Sheng Hu 1430-1446
- Robust Control under Constraints of Linear Systems with Markovian Jumps, Mohammed Benbrahim*, Mohammed Nabil Kabbaj, and Khalid Benjelloun 1447-1454
- Iterative Learning Control for a Class of Mixed Hyperbolic-parabolic Distributed Parameter Systems, Qin Fu*, Wei-Guo Gu, Pan-Pan Gu, and Jian-Rong Wu 1455-1463
- Robust Backstepping Control for a Class of Nonlinear Systems using Generalized Disturbance Observer, Jiang Wang*, Shaoming He, and Defu Lin 1475-1483
- Modified Stochastic Gradient Parameter Estimation Algorithms for a Nonlinear Two-variable Difference System, Jing Chen and Bin Jiang* 1493-1500
- Synchronous Position Control Strategy for Bi-cylinder Electro-pneumatic Systems, Hong Zhao and Pinhas Ben-Tzvi* 1501-1510
- Attitude Determination Algorithm using State Estimation Including Lever Arms between Center of Gravity and IMU, Tae Hyun Fang*, Sang Hyun Park, Kiyeol Seo, and Sul Gee Park 1511-1519
- A New Instantaneous Center Analysis Methodology for Planar Closed Chains via Graphical Representation, Maeum Kim, Min Seob Han, TaeWon Seo*, Jeh Won Lee* 1528-1534
- A Monocular Structured Light Vision Method for Pose Determination of Large Non-cooperative Satellites, Xue-Hai Gao, Bin Liang*, Le Pan, Zhi-Heng Li, and Ying-Chun Zhang 1535-1549
- Path Tracking Controller Design of Four Wheel Independent Steering Automatic Guided Vehicle, Yuhanes Dedy Setiawan, Trong Hai Nguyen, Pandu Sandi Pratama, Hak Kyeong Kim, and Sang Bong Kim* 1550-1560
- Projected Predictive Energy-Bounding Approach for Multiple Degree-of-Freedom Haptic Teleoperation, Riaz Uddin, Sangsoo Park, Sungjun Park, and Jeha Ryu* 1561-1571
- Positioning and Obstacle Avoidance of Automatic Guided Vehicle in Partially Known Environment, Pandu Sandi Pratama, Trong Hai Nguyen, Hak Kyeong Kim, Dae Hwan Kim, and Sang Bong Kim* 1572-1581
- Heuristic Feature Extraction Method for BCI with Harmony Search and DiscreteWavelet Transform, Seung-Min Park, Tae-Ju Lee, and Kwee-Bo Sim* 1582-1587
- Less Conservative Robust Stabilization Conditions for the Uncertain Polynomial Fuzzy System under Perfect and Imperfect Premise Matching, Han Sol Kim, Jin Bae Park*, and Young Hoon Joo 1588-1598
- Linear Pole-placement Anti-windup Control for Input Saturation Nonlinear System Based on Takagi Sugeno Fuzzy Model, Fa-Guang Wang*, Hong-Mei Wang, Seung-Kyu Park, and Xue-Song Wang 1599-1606
- Robust RST Control Design based on Multi-Objective Particle Swarm Optimization Approach, Riadh Madiouni, Soufiane Bouallegue*, Joseph Haggege, and Patrick Siarry 1607-1617
- Effective Pedestrian Detection using Deformable Part Model based on Human Model, Hye Ji Choi, Yoon Suk Lee, Duk-Sun Shin, Chan Gun Lee, and Kwang Nam Choi* 1618-1625
- A Simple Smoother for Attitude and Position Estimation using Inertial Sensor, Huu Toan Duong and Young Soo Suh* 1626-1630

4.7. Contents: International Journal of Control
Contributed by: Bing Chu, b.chu@soton.ac.uk

International Journal of Control
Volume 89, Issue 12, 2016
http://www.tandfonline.com/toc/tcon20/current

- Adaptive observer design for discrete time LTV systems, Alexandru Ticlea & Gildas Besançon, pages: 2385-2395
- Output feedback stabilisation for a cascaded wave PDE-ODE system subject to boundary control matched disturbance, Hua-Cheng Zhou, Bao-Zhu Guo & Ze-Hao Wu, pages: 2396-2405
- Dynamic anti-windup design for a class of nonlinear systems, J. M. Gomes da Silva Jr., M. B. Longhi & M. Z. Oliveira, pages: 2406-2419
- Integrated control design for driver assistance systems based on LPV methods, Péter Gáspár & Balázs Németh, pages: 2420-2433
- Computing actuator bandwidth limits for model reference adaptive control, Benjamin C. Gruenwald, Daniel Wagner, Tansel Yucelen & Jonathan A. Muse, pages: 2434-2452
- Global finite-time stabilisation for a class of stochastic high-order time-varying nonlinear systems, Fangzheng Gao & Yuqiang Wu, pages: 2453-2465
- Quantum gate generation for systems with drift in U(n) using Lyapunov–LaSalle techniques, H.B. Silveira, P.S. Pereira da Silva & P. Rouchon, pages: 2466-2481
- Disturbance attenuation for Markov jump linear system over an additive white Gaussian noise channel, Yang Song, Jie Yang, Min Zheng & Chen Peng, pages: 2482-2491
- Permanence and almost periodic solution of two-species delayed Lotka–Volterra cooperative systems with
impulsive perturbations, Yonghong Yang & Shoude Huang, pages: 2492-2506
- Adaptive output-feedback stabilisation for hybrid PDE–ODE systems with uncertain input disturbances, Zaihua Xu, Yungang Liu & Tian Li, pages: 2507-2519
- LMI-based LSVF control of a class of nonlinear systems with parametric uncertainty: an application to an inverted pendulum system, Chaiti Sarkar & Aparajita Sengupta, pages: 2520-2532
- Zero dynamics stabilisation and adaptive trajectory tracking for WIP vehicles through feedback linearisation and LQR technique, Ming Yue, Cong An & Jianzhong Sun, pages: 2533-2542
- Modelling on optimal portfolio with exchange rate based on discontinuous stochastic process, Wei Yan & Yuwen Chang, pages: 2543-2548
- Nonlinear H∞-control under unilateral constraints, O. E. Montano, Y. Orlov & Y. Aoustin, pages: 2549-2571
- A skewed unscented Kalman filter, Javad Rezaie & Jo Eidsvik, pages: 2572-2583
- Subspace algorithms for identifying separable-in-denominator 2D systems with deterministic–stochastic inputs, José A. Ramos & Guillaume Mercère, pages: 2584-2610

4.8. CFP: Control Theory and Technology
Contributed by: Zou Tiefeng, tfzou@scut.edu.cn

Call for Papers of Control Theory and Technology
(Control Theory and Technology was formerly named Journal of Control Theory and Applications)
Special Issue on Quantum Control, Dedicated to the Occasion of Prof. Ian Petersen’s 60th birthday

Ian R. Petersen, a Fellow of the IEEE and the IFAC, a key figure in the development of robust and quantum control theory, and an ARC Laureate Fellow at UNSW Canberra, will turn 60 this year. We propose to celebrate this occasion with a special issue on quantum control, one of his main research focuses in the last fifteen years. Emerging quantum technology is recognized as one of the most promising future technologies. By exploiting the unique features of quantum effects, emerging quantum technology is rapidly developing around the world involving quantum computation, quantum communication, quantum metrology and quantum simulation. The development of quantum control theory is a key task in practical quantum technology. This special issue will focus on new development in relevant topics of estimation and control methods in quantum systems, and provide a forum for idea exchange in the emerging research area.

Topics include but not limited to:
* Modelling and analysis of quantum control systems
* Estimation of quantum systems
* Hamiltonian identification of quantum systems
* Parameter identification of open quantum systems
* Linear quantum systems theory
* Quantum optimal and robust control
* Quantum network theory and control
* Quantum measurement-based feedback and quantum coherent feedback
* Learning control of quantum systems
* Quantum control applications in molecular systems, quantum metrology and quantum information

Submission guideline:
All manuscripts must be submitted through the manuscripts system at https://controls.papercept.net/.
Manuscripts should be clearly marked as being submitted to the special issue on quantum control (please clarify in the cover note if the paper is submitted to this special issue).

Important dates:
Submission deadline: January 31, 2017
Acceptance notification: March 15, 2017
Publication date: April 2017

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All submitted papers will be subject to peer review in accordance with the standard review procedures of the Control Theory and Technology.

Control Theory and Technology (formerly named Journal of Control Theory and Applications) publishes high-quality papers in the broadest areas of systems and controls, covering original research results and applications of new and established control methods. The journal is published by Springer Science and indexed in SCOPUS, EI-Compendex, INSPEC, and other systems.

4.9. CFP: Journal of Process Control
Contributed by: Nicolas Petit, nicolas.petit@mines-paristech.fr

CFP: Special Issue on Efficient energy management, Journal of Process Control

In the recent years, the question of efficient energy management has emerged as a question of prime importance, for industrialized and developing countries, worldwide. The industry and its engineers have answers to bring to this global problem for several reasons. Industry consumes a large part of the produced energy. Industry also provides the world with new technologies that are key enablers for improved (smart) consumptions. Industry operates large systems, and produces vastly deployed equipments and technologies. The aim of this Special Issue on Efficient energy management is to call for contributions that apply, develop, and study general problems targeting energy and cost savings. Contributions are especially sought on examples of systems and methods that have the potential to bring innovative solutions and that promote energy efficient operation of existing or new systems.

The perspective contributions might include but are not limited to i) energy and demand minimization, peak demand reduction, production and consumption scheduling, demand response scenarios, energy consumption models, energy prices, optimal operation of existing plants and energy demanding processes, differential
games for energy management; ii) micro grids, heat storage, battery, energy integration; iii) electricity production, refrigeration systems, heat pumps, micro generators.

Instructions for submission
Papers are due by March 15, 2017, and should be submitted online. Please use Elsevier electronic submission system at http://ees.elsevier.com/jprocont/ and make sure to select “SI:EFF_ENG_MNGT” when you reach the “Article Type” step in the submission process.

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4.10. CFP: Journal of Control and Decision
Contributed by: Jun Chen, jchenec2015@gmail.com

CALL FOR PAPERS: Special Issue on Advances on Control and Decision for Power and Energy Systems
Journal of Control and Decision is calling contribution for special issue on Advances on Control and Decision for Power and Energy Systems. Topics of interest for theoretical advancements include, but are not limited to:
- Physical and/or data-driven modeling
- Simulation and co-simulation
- Adaptive control, supervisory control, optimal control
- Cooperative control, distributed/decentralized systems, networked control systems
- Stochastic discrete event systems and hybrid systems
- Stochastic optimization methods
- Decision-making theory and method
- Fault diagnosis and fault-tolerant control
- Resilient control, resiliency analysis
Areas of application include, but are not limited to:
- Cyber-physical systems
- Smart grids, smart homes/buildings
- Microgrids
- Renewable energies
- Plug-in electric vehicles
- Energy storage systems
- Energy management systems for smart grid/homes/building
- Demand response control and optimization
- Distribution system voltage regulation and control
All papers are to be submitted through the JCD’s ScholarOne Manuscripts Website https://mc.manuscriptcentral.com/tjcd. Please select “Advances in Control and Decision for Power and
Energy Systems” as special session when submitting. All manuscripts must be prepared according to JCD’s guideline http://www.tandfonline.com/toc/tjcd20/current. For inquiries please address to Dr. Jun Chen (jchenee2015@gmail.com).

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. 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
5.3. International Carpathian Control Conference
Contributed by: Dan Popescu, dpopescu@automation.ucv.ro

2017 18th International Carpathian Control Conference (ICCC)
Romania, Sinaia, Palace Hotel, May 28-31, 2017

Aim and scope:
The aim of the conference is to support exchange of information and experience in the field of automation in
engineering and production, in research, applications, and education. The conference will enable presentation
of most recent advances in complex automation, robotics, modelling, control of production and technological
processes, including quality control systems oriented to environment, means of support, and information
technologies.

The conference topics include (but are not limited to):
1. Measurement, sensors, monitoring and diagnostic systems.
2. Identification, modeling, simulation of processes and systems.
3. Theory and application of control systems.
4. Automation, mechatronics, robotics.
5. Intelligent embedded systems, instrumentation and Internet of things (IoT).
6. Information systems (SCADA/HMI, GIS, MES) and their Internet support.
7. Engineering application of informatics.
8. Quality control systems (TQM), production management and industrial logistics.
9. Engineering education in control and computer systems.
10. Artificial Intelligence and Multimedia Applications.

Important deadlines:
December 15, 2016: Registration and abstract submission.
January 15, 2017: Full papers submission for review.
February 20, 2017: Notification of acceptance/rejection (after review process).
March 27, 2017: The final registration card delivery, accommodation reservation and payment of the confer-
ence fee.

Paper submission is open from EasyChair:
https://easychair.org/conferences/?conf=iccc2017

More information on the conference web site:
http://www.ace.ucv.ro/iccc2017

5.4. International Conference on Control, Automation and Systems
Contributed by: Hye-Soo Kim, conference@icros.org
The Jeju (also known as Jeju Island) is the largest island off the coast of the Korean Peninsula. The Jeju contains the natural World Heritage Site Jeju Volcanic Island and Lava Tubes, and has a temperate climate. The aim of the ICCAS is to bring together researchers and engineers worldwide to present their latest works, and disseminate the state-of-the-art technologies related to control, automation, robotics, and systems.

IMPORTANT DATES
Proposal for invited/organized session (Mini-symposium)
- June 10, 2017: Submission deadline
Regular papers (3 - 6 pages) & Invited/organized session papers (1 - 6 pages)
- June 15, 2017: Submission deadline
- August 1, 2017: Notification of acceptance
- August 31, 2017: Submission of final camera-ready papers
Research poster papers (1 - 2 pages)
- August 22, 2017: Submission deadline
- August 31, 2017: Notification of acceptance
- September 7, 2017: Submission of final camera-ready papers

Organizing Chair: Doyoung Jeon (Sogang Univ., Korea)
Program Chair: Hyosung Ahn (GIST, Korea)

5.5. Chinese Control and Decision Conference
Contributed by: Changyun Wen, ecywen@ntu.edu.sg

The 29th Chinese Control and Decision Conference (2017CCDC)
http://www.ccdc.neu.edu.cn

Extended Paper Submission Deadline: 30 November 2016

The 29th Chinese Control and Decision Conference (2017CCDC) will be held in Chongqing, China, during May 28 - 30, 2017. Per the requests of numerous researchers, the organizing committee has extended the deadline for 2017CCDC paper submission to 30 November 2016, after taking every factor into account. Conference papers written in English will be submitted for inclusion in IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. High-quality papers in 2017 CCDC will be recommended for submission to the Journal of Control and Decision published quarterly by TAYLOR & FRANCIS GROUP.

In additional to technical sessions, there will be four KEYNOTE ADDRESSES and eight DISTINGUISHED LECTURES covering the State-of-the-Art in both theory and applications of Systems, Control and Decision.
Invited Keynote Addresses will be delivered by
- Prof. Edwin K. P. Chong, Colorado State University, USA;
- Prof. Jiancheng Fang, Beihang University, China;
- Prof. Petros Ioannou, University of Southern California, USA;
- Prof. Stephen P. Boyd, Stanford University, USA.
Invited Distinguished Lectures will be delivered by
- Prof. Zhiyong Chen, University of Newcastle, Australia;
- Prof. Joe Dong, University of Sydney, Australia;
- Prof. Zhi-Hong Guan, Huazhong University of Science & Technology, China;
- Prof. Haibo He, Rhode Island University, USA;
- Prof. Min Huang, Northeastern University, China;
- Prof. Karl H. Johansson, KTH Royal Institute of Technology, Sweden;
- Prof. Hong Qiao, University of Chinese Academy of Sciences, China;
- Prof. Tie-Long Shen, Sophia University, Japan.

Important Dates:
Deadline for Full Paper Submission 30 November 2016
Deadline for Invited Session Proposals 30 November 2016
Notification of Acceptance/Rejection 10 February 2017
Deadline for Camera Ready Manuscript Submission 10 March 2017
Deadline for Advance Registration 10 March 2017

Highlight of Chongqing Attractions
Chongqing is a well-known city with a history of more than 3000 years. Chongqing is the birthplace of the Bayu Culture. It was the capital of China for seven years during World War II. At present, Chongqing is a municipality directly under the Central Government with the largest area, the most administrative districts and the largest population.

Given the area’s population density and its prominent role in Chinese history, it is no surprise that Chongqing offers an array of major historical and cultural attractions: cityscapes, mountains, revolutionary sites, cultural relics, parks, scenic spots, and natural beauty. The central urban area of Chongqing is wedged between the Yangtze River and the Jialingjiang River, surrounded by hills and mountains. With green hills and clear waters, the scenery is unique. Buildings are massed in picturesque disorder near the mountains and at the rivers’ edge. From a vantage point at night, one can see a myriad of glittering lights, contrasting pleasantly with clear glistening lights from the waves of two rivers and flashing stars all over the sky. This combination makes for a magnificent scene. On a starry night, it is an experience rarely found anywhere on the planet!

Outside the urban area, there are many other places worth visiting, mostly featured historical sites or parks of natural landscapes and landforms. These include UNESCO World Heritage sites: spectacular Dazu Rock Carvings and Wulong Karst Region. Chongqing is the starting port for the Yangtze River cruise, going for a downstream tour to the magnificent Three Gorges through the Three Gorges Dam.

For further information, please refer to Website - http://www.ccdc.neu.edu.cn
E-mail secretary_ccdc@ise.neu.edu.cn.

5.6. 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 EUR 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

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5.7. **IEEE Colombian Conference on Automatic Control**

**Contributed by:** José García-Tirado, ieeeccac2017@gmail.com

First Call for Papers

3rd IEEE Colombian Conference on Automatic Control 2017

**Scope:** The 3rd IEEE Colombian Conference on Automatic Control (CCAC) will be held on October 18-20, 2017 in Cartagena-Colombia. The objective of the Conference is to gather academic and industrial researchers and practitioners, to discuss the state of the art, research and developments in advance control-robotics and its applications for sharing and encouraging technology development in Colombia and the Latin American region. The thematic emphasis of the Conference will be covering the theory, the implementation issues and the experiences related to the applications of control, automation and robotics methods in research, academy and industry. The main topics for the event include, but are not limited to, the following:

- Applied control for industrial and non-industrial areas, applied control for robots, hybrid systems, intelligent control, mechatronics, mobile robots, modeling of dynamic systems, multi-robot systems, process and power systems, process automation, process optimization, sensing and sensor fusion, system identification, systems and signals, control in power electronics and electrical drives.

**Important Dates:**
- May 9, 2017 Papers submission deadline
- June 30, 2017 Papers acceptance notification
- August 11, 2017 Final manuscripts in camera-ready format

**Paper submission:** The program committee invites you to submit 4 to 6 pages long papers in English or Spanish through www.ieeeccac2017.org

Submitted papers to CCAC must be original, not previously published or accepted for publication elsewhere and must not be submitted to any other event or publisher during the entire review process. IEEE policy regarding plagiarism and duplicate submission/publication will be strictly enforced. The paper format and submission instructions are available at www.ieeelarc.org. All articles will be published in the Conference Proceedings. Only English versions will be published in IEEEXplore.

**Venue:** The conference will be held at Cartagena de Indias, city on the northern coast of Colombia in the Caribbean Coast Region and capital of the Bolívar Department. It is the fifth-largest city in Colombia and the second largest in the region, after Barranquilla. The Cartagena urban area is also the fifth largest urban area in the country. Economic activities include maritime and petrochemicals industry, as well as tourism. During the colonial period Cartagena served a key role in administration and expansion of the Spanish empire. It was a center of political and economic activity due to the presence of royalty and wealthy viceroys. In 1984, Cartagena’s colonial walled city and fortress were designated a UNESCO World Heritage Site. (further details soon).

**Contact:** Additional details and Conference updates are available at: http://www.ieeeccac2017.org

Inquiries and doubts about the Conference may be addressed to: info@ieeeccac2017.org
5.8. IEEE International Conference on Automation Science and Engineering  
Contributed by: (Samuel) Qing-Shan Jia, jiaqs@tsinghua.edu.cn

Call for Papers

IEEE CASE 2017, the 13th IEEE International Conference on Automation Science and Engineering  
August 20-23, 2017, Xi’an, China  
http://www.case2017.org

The 13th IEEE International Conference on Automation Science and Engineering (IEEE CASE 2017), sponsored by the IEEE Robotics and Automation Society (RAS), will be held in Xi’an, China, August 20-23, 2017. IEEE CASE is a flagship automation conference of the IEEE RAS and constitutes the primary forum for cross-industry and multi-disciplinary research in automation. Its goal is to provide a broad coverage and dissemination of foundational research in automation among researchers, academics, and practitioners. The technical program of IEEE CASE 2017 will consist of tutorials/workshops, keynote/plenary speeches, automation forums, and oral presentations. Papers describing original work on abstractions, algorithms, theories, methodologies, and case studies are invited. Accepted and presented papers will be published in the conference proceedings, and submitted for inclusion into IEEEXplore as well as other Abstracting and Indexing (A&I) databases. IEEE CASE is an offspring of the journal IEEE Transactions on Automation Science and Engineering (TASE). The journal will publish a CASE Special Issue of top-rated papers. IEEE Robotics and Automation Letters (RA-L) will also accept journal quality publications in conjunction to CASE 2017.

Regular papers and special session proposals and papers should be submitted online at the conference website at www.case2017.org. One new feature of CASE 2017 is that the authors of the papers published or accepted in and after 2016 by IEEE TASE or IEEE Transactions on Robotics can request presentation of their papers at the conference in the newly organized “transaction paper sessions”. General inquiries should be addressed via Email to the Program Chair, Prof. Qing-Shan Jia at jiaqs@tsinghua.edu.cn. The best conference paper award, the best application paper award, and the best student paper award will be selected.

The organizing committee of CASE 2017 cordially invite you to submit full paper contributions and hope to see you in Xi’an, China in August 2017!

Conference Tracks:

- Future Manufacturing Systems
  - Reconfigurable manufacturing systems
  - Industrial robotics
  - Coordination and scheduling
  - CPS and industrial Internet
- Foundation of Automation
  - Discrete event systems
  - Hybrid systems
  - Fault analysis and recovery
  - System modelling and simulation
  - Monitoring and control
- Life Sciences and Healthcare
  - Lab automation
. Automation in treatment diagnosis and disease
. Hospital and medical robotics
. Healthcare management systems
Automation in Meso, Micro, and Nano-scale
. Cluster tool scheduling
. Fab modelling and analysis
. Metrology
. Nano-manufacturing
Big Data for Automation
. Web, Data, and Text Mining
. Web services and service oriented architectures
. Machine learning
. Software engineering in automation
. Workflow management systems
Automation in Logistics and Supply Chain Management
. Material handling and assembly
. IT-enabled planning, coordination, and scheduling
. Resource allocation and management
. Automation in remanufacturing and reverse logistics
Networked and Control Systems
. Distributed control systems
. Multiagent planning and control
. Sensor/actuator networks
. Wireless communication and control
Cyber Physical Energy Systems
. Smart buildings
. Intelligent transportation systems
. Smart cities
. Micro and smart grids
And other topics

About Xi’an
Xi’an is a famous historical and cultural city in China. It is the cradle of the Chinese nationality, the birthplace of the Chinese civilization and the representative of the Chinese culture. The city was first established more than 3100 years ago and it has been taken as a capital for 1129 years for 13 dynasties. It is one of the most ancient capitals of the world, in the company of Athens, Rome and Cairo. The city once functioned as the political, economic and cultural center of China and as the starting point of the renowned Silk Road. Due to its long history and rich culture, the city is reputed to be the natural history museum.

Important Dates
Dec. 01, 2016 Submission site opens;
Jan. 11, 2017 Special session proposal due;
Jan. 29, 2017 Special session acceptance notification;
Tutorial/workshop proposal submission due;
Feb. 15, 2017 Contributed paper submission due;
Feb. 15, 2017 RA-L/CASE submission due;
Feb. 26, 2017 Tutorial/workshop acceptance notification;
We would like to catch your attention for the following three special sessions (SSs) in The 2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2017).

This top-leading event in the area of theory and application of fuzzy logic will be held in Naples, Italy in 2017, July 9-12.

Manuscripts submitted to special sessions should be done through the paper submission website of FUZZ-IEEE 2017. All papers submitted to special sessions will be subject to the same peer-review procedure as the regular papers.

Deadline for the paper submission to SSs is 25th Jan, 2017.

The organisers of the FUZZ-IEEE 2017 SSs below would like to invite you to submit papers to:

**SS2: Game of Drones: Intelligent Control of Aerial Robotics**

**SS3: Type-1 and Type-2 Neuro Fuzzy Systems: Quo Vadis?**

**SS7: Advances to Type-2 Fuzzy Logic Control**

The special sessions have already been announced on the following web address:


We are looking forward to hearing from you. We hope to see you in Italy!

Kind Regards

Erdal Kayacan (on behalf of the SS organizers)

**SS 2: Game of Drones: Intelligent Control of Aerial Robotics organizers:**

Erdal Kayacan  
Nanyang Technological University  
erdal@ntu.edu.sg  
Mojtaba Ahmadieh Khanesar  
Semnan University  
ahmadieh@semnan.ac.ir  
Mehmet Onder Efe  
Hacettepe University  
onderefe@gmail.com

**SS 3: Type-1 and Type-2 Neuro Fuzzy Systems: Quo Vadis? organizers:**

Erdal Kayacan  
Nanyang Technological University  
erdal@ntu.edu.sg  
Mojtaba Ahmadieh Khanesar  
Semnan University
5.10. IEEE International Conference on Fuzzy Systems: Tutorial
Contributed by: Erdal Kayacan, erdal@ntu.edu.sg

A new tutorial in FUZZ-IEEE 2017: Vision-Based Control of UAVs Using Type-1 and Type-2 FLCs with ROS

FUZZ-IEEE is the top leading conference in the area of theory and applications of fuzzy logic.

Let’s meet in Napples, Italy in FUZZ IEEE 2017, 9-12 July 2016!

As a model-free control technique, type-1 and type-2 fuzzy logic controllers (FLCs) have already been implemented in many industrial control systems. However, they still lack in real-time implementations for UAVs, especially for type-2 FLCs. Therefore, the main aim of this tutorial is to discuss and present real-time implementations of type-1 and type-2 FLCs for controlling UAVs.

This tutorial will consist of two parts:
Part 1: Theoretical framework for type-1 and type-2 FLCs, vision-based control and ROS
1) We will focus on theoretical basis and definitions of type-1 and type-2 FLCs, introduce state-of-art computer vision algorithms for six degree of freedom pose estimation, various commercial applications of UAVs and discuss their limitations and some reasons why FLCs may be useful.
2) We will present a complete computer vision-based control structure of type-1 and type-2 FLCs for navigating UAVs in ROS environment. The main focus will be implementation of type-1 and type-2 FLCs for control of UAVs, and integration of computer vision algorithms and fuzzy controls.
Part 2: Real-Time implementation using ROS
1) We will demonstrate autonomous navigation of UAVs and discuss different fuzzy controller performances. We will also talk about online tuning of FLCs and its advantages under different noisy working conditions.
2) A sample program will be provided so that attendees can explore real-time implementations of UAV control using different FLCs.

6. Positions

6.1. PhD: Australian National University, Australia

Contributed by: Sergiy Bogomolov, sergiy.bogomolov@anu.edu.au

PhD Student positions in Cyber-physical Systems/Artificial Intelligence/Systems Biology
at
Cyber-Physical Systems Laboratory
Research School of Computer Science
College of Engineering and Computer Science
Australian National University

Cyber-Physical Systems Laboratory led by Dr Sergiy Bogomolov is seeking applications for multiple research positions as PhD students to work on a range of topics in the area of cyber-physical systems (e.g., autonomous cars, smart buildings) and their applications in artificial intelligence and systems biology.

Possible research topics include:
* verification and synthesis techniques for cyber-physical systems
* AI planning in mixed discrete-continuous domains
* biological systems modelling using hybrid automata

Candidate profile:
* strong background in Computer Science and/or Mathematics (particularly numerical methods, differential equations, control and optimization theory)
* solid programming skills in C++/Java/Python/Matlab
* should have completed, or about to complete, a Bachelors/Masters/Honours degree in Computer Science or related areas

Please send a complete CV as well as your motivation letter and transcripts to Dr Sergiy Bogomolov (sergiy.bogomolov@anu.edu.au). For more information, please consult http://www.sergiybogomolov.com/.

The Australian National University is a top ranked university (#22 world-wide according to QS world university rankings 2016) located in Canberra, the capital city of Australia. Canberra enjoys one of the highest quality of life in the world (most liveable city according to Regional Well-Being Report 2014 by OECD).

6.2. PhD: CNRS Grenoble, France

Contributed by: Hannah Walter, Hannah-Christina.Walter@gipsa-lab.fr

PhD position: EVOLUTIONARY SCALE-FREE MODELS FOR LARGE SCALE COMPLEX NETWORKS
PhD: CNRS, Grenoble, France.
NeCS group (joint CNRS (GIPSA-lab)-INRIA team), in Collaboration with the University of Padova.
Supervisors: Carlos Canudas-de-Wit (CNRSmain supervisor), Sandro Zampieri (UDP co-supervisor).
Context: ERC-AdG Scale-FreeBack

TOPIC DESCRIPTION. This research proposal deals with the problem of setting up a suitable modelling framework for complex systems corresponding to large-scale networks. The original system is assumed to describe a homogenous network in which the node/link distribution of G gives a bell-shaped, exponentially decaying curve. Homogenous networks cover many critical systems of interest (such as road traffic networks, power grids, water distribution systems, etc.), but are inherently complex. Scale-FreeBack is elaborated on
the idea that complexity can be broken down by abstracting an aggregated scale-free model (represented by a network with a power law degree distribution), by merging/lumping neighboring nodes in the original network. In that, supper-nodes (nodes with a lot of connections) are created and represented by “aggregated” variables. Controlling only boundary inputs and observing only aggregated variables allows to cut-off the system complexity. The following questions will be addressed:

1) Defining the most suitable level of aggregation for the model. This boils down to defining and sizing the state-vector, the control inputs and outputs. A first question is how to define the right level of aggregation, and investigate new metrics trading quantifiers reflecting an optimal level of scalability (a suited node/link distribution) of the associated network graph, with other performance indexes reflecting the system’s closed-loop operation.

2) The second question focuses on how the aggregation process, in addition to the scale-free property, will yield models consistent with the design of control and the observation goals. The aggregation process will have to include observability and controllability properties which are consistent with the evolutionary nature of scale-free aggregated models (aggregation process is evolutionary in the sense that the network changes and so the aggregated modules will change accordingly while preserving the scale-free properties).

3) Finally, innovative concepts such as peripheral controllability (i.e. controlling the boundary flows in a lumped node rather than controlling each single node separately), and energy-weighted controllability metrics (where controllability is qualified by assessing the energy costs as a function of the controllable nodes [Zam-et-al’14]) will be extended in this project to the context of scale-free models. While only open loop metrics have been considered so far, we aim to propose new closed loop metrics also taking inspiration from road traffic networks application. Moreover we intend to extend these concepts to the estimation and monitoring by investigating the observability of aggregated networks. Finally, we will propose and investigate different new weak notions of controllability/observability in which the controllability/observability is determined with respect to a limited subspace (peripheral and/or sparse controllability/observability).

QUALIFICATION: knowledge and mathematical background in systems and control theory, Complex and/or networked controlled systems.

EMPLOYMENT AND CONTEXT: This full-time position for 3 years. In our NeCS team at Grenoble, we offer a dynamical research environment with a strong activity in networked controlled systems. This PhD position is part of the large research project Scale-FreeBack ERC Advanced Grant 2016-2021. The ERC is hosted by the CNRS, and the project will be conducted within the NeCS group (which is a joint CNRS (GIPSA-lab)-INRIA team).

APPLICATIONS: Please follow instructions:
http://www.gipsa-lab.grenoble-inp.fr/ carlos.canudas-de-wit/ERC.php


6.3. PhD: Instituto Politécnico Nacional, Mexico
Contributed by: Konstantin E. Starkov, kstarkov@ipn.mx


Two PhD student positions are available under the supervision of Prof. Dr. Konstantin Starkov (kstarkov@ipn.mx, konstarkov@hotmail.com, konst@citedi.mx).
This analysis is applied to modeling of cancer growth, validation of the obtained model, its modification or correction and for the prediction of patient health status and adjustment of treatment.

Research area and project description
Dynamical analysis of cancer growth models under various types of therapy is in a great demand and is one of the most rapidly developing areas arisen as an integration of nonlinear science, medicine and biology. This analysis may be realized with help of a solution of control problems for systems describing by nonlinear ordinary differential equations. This field contains a large number of intriguing, entertaining and useful problems emerged from nonlinear dynamics, chaos theory and control theory: finding upper and lower bounds for a density of interacting cells populations, establishing the property of dissipativity in the sense of Levinson; existence of a chaotic attractor and/or periodic orbits, existence of bistable behavior, studies of nonlocal dynamics of the process of cancer development, equilibrium points outside the tumor free coordinate plane; finding asymptotic tumor clearance conditions, other related problems and biological interpretation of the obtained results. A trustworthy new original method of applied mathematics is employed for carrying out these studies.

It is assumed that the PhD students are going to take part in the realization of the CONACYT project N 219614 with the title "Análisis de sistemas con dinámica compleja en las áreas de medicina matemática y física utilizando los métodos de localización de conjuntos compactos invariantes" (2015-2018), Mexico. Countries participating in this project are Mexico, Spain, Russia and the Netherlands. Director of this Project is Dr. K. Starkov.

Financial support for studying in this PhD program will be provided by CONACYT (around 13000 Mex Peso monthly, net amount). An additional income from resources of Dr. Starkov’s IPN projects will be also available.

The PhD program period is 3-4 years.

Qualifications and specific competences:
Students with background in Control Systems or Engineering disciplines are welcomed to apply. Preferences are given for students with a strong background in Applied Mathematics / Nonlinear Dynamics or Mathematical Medicine / Biology.

Requirements for applicants.
The desired candidates hold a Master degree (or equivalent, giving access to doctoral studies) in the mentioned areas and have
- An excellent academic record showing analytical skills;
- A strong mathematical background in the mentioned areas;
- Strong interest to work in the proposed area;
- Ability in oral and written English.

If you have interest to this position you should send an email to posgrado@citedi.mx including:
- One page cover letter describing your research and early achievements;
- Bachelor and master transcripts (list of courses with corresponding grades);
- A summary of (or an e-link to) your master thesis;
- Name and email of three referees.

Contacts:
Applicants seeking further information are invited to contact Postgraduate Department Head, M.Sc. Luis Miguel Zamudio Fuentes at posgrado@citedi.mx
6.4. PhD: Brose Fahrzeugteile GmbH, Germany
Contributed by: Cristian Kunusch, cristian.kunusch@brose.com

PhD 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

6.5. PhD: Chalmers University, Sweden
Contributed by: Jonas Sjöberg, jonas.sjoberg@chalmers.se

PhD: Chalmers University, Gothenburg, Sweden
PhD position developing algorithms for autonomous vehicles

The main objective of this research is to develop and experimentally validate motion control algorithms for autonomous vehicles in complex urban environments. The successful candidate will be engaged in both fundamental and experimental research. In particular, the candidate will develop control algorithms and experimentally validate them off-line with real-world data and, if possible, on-line in full-scale vehicles. Strong theoretical and practical problem-solving capabilities are required.

More information, and instructions how to apply, can be found at http://www.chalmers.se/en/about-chalmers/vacancies/Pages/default.aspx

Application deadline is December 31st.

6.6. PhD/PostDoc: University of Pennsylvania, USA
Contributed by: James Weimer, weimerj@seas.upenn.edu

RESEARCH POSITIONS in CYBER-PHYSICAL SECURITY at
PRECISE Center
School of Engineering and Applied Science
University of Pennsylvania
http://precise.seas.upenn.edu/

PRECISE center at the University of Pennsylvania is seeking applications for research positions as PhD students and postdoctoral fellows to work on systems aspects of CPS security. The project involves the development of security-aware cyber-physical systems for autonomous vehicles on land, air, and sea, and networked medical devices. Researchers with an interest and experience in any related areas are welcome to apply. Particular areas of interest include one or more of the following:
- Attack models for control systems and resilience against attacks
- Autonomous systems and human-in-the-loop systems
- Hacking and securing embedded devices
- Implementation of network and/or operating systems
- Systems development and implementations

Candidates are expected to have a strong background in one or more of the above areas.

Positions are offered based on experience level, with an option to extend based on mutual agreement. As soon as possible starting date is strongly desired. A competitive salary will be offered.

Please send a complete CV including research statement to Insup Lee (lee@cis.upenn.edu), George Pappas (pappasg@seas.upenn.edu), or James Weimer (weimerj@seas.upenn.edu).

6.7. PhD/PostDoc: University of Pennsylvania, USA
Contributed by: James Weimer, weimerj@seas.upenn.edu

RESEARCH POSITIONS in MEDICAL CYBER-PHYSICAL SYSTEMS at
PRECISE Center
School of Engineering and Applied Science
University of Pennsylvania
http://precise.seas.upenn.edu/

PRECISE center at the University of Pennsylvania is seeking applications for research positions as PhD students and postdoctoral fellows to work on multiple projects related to health informatics and personalized health. The projects involve developing safe and secure medical device interoperability and quantitative techniques for vital sign data acquisition, analysis, and implementation of closed-loop physiological cyber-physical systems using medical devices. The target medical devices include (but are not limited to) wearable technologies, bedside monitors, mechanical ventilators, anesthesia machines, and proton therapy machines. Researchers will work closely with our clinical colleagues at the Hospital of the University Pennsylvania (HUP) and the Children’s Hospital of Philadelphia (CHOP).

Researchers with an interest and experience in any related areas are welcome to apply. Particular areas of interest include one or more of the following:
- Control of physiological systems and networked devices
- Formal methods for life critical systems
- Machine learning for personalized health
- Security of embedded medical systems
- Systems development and implementations

Preferred candidates are expected to have a strong theoretical background and proven system-building skills. Positions are offered based on experience level, with an option to extend based on mutual agreement. As soon as possible starting date is strongly desired. A competitive salary will be offered.

Please send a complete CV including research statement to Insup Lee (lee@cis.upenn.edu), Oleg Sokolsky (sokolsky@cis.upenn.edu) or James Weimer (weimerj@seas.upenn.edu).

6.8. PostDoc: Missouri University of Science & Technology, USA
Contributed by: Robert G. Landers, landersr@mst.edu

Missouri S&T has an opening for a post-doctoral position in additive manufacturing control working with Professors Doug Bristow and Robert Landers. The project involves the development of new algorithms for microstructure control in selective laser melting (powderbed) metal additive manufacturing. A Renishaw AM250 SLM machine, specially instrumented for control, is located at Missouri S&T for algorithm development and testing. The postdoc will collaborate with a multidisciplinary team of faculty and graduate students in heat transfer and materials science, as well as scientists and engineers at the Department of Energy National Security Campus and Renishaw. The project is funded by Honeywell Federal Manufacturing and Technologies.

The postdoctoral position is available immediately. The applicants must have a Ph.D. in Mechanical or Electrical Engineering (or closely related field), a strong background in control systems theory and/or applications, and excellent communication skills. Experience with manufacturing applications and multidimensional control (e.g., PDE control, Repetitive Process Control) are preferred.

Interested applicants should send their CV including references and a cover letter describing their interests and suitability to the position to Prof. Robert G. Landers (landersr@mst.edu).

Robert G. Landers
Professor, Dept. of Mechanical & Aerospace Engineering
Missouri University of Science & Technology
6.9. PostDoc: University of Michigan, USA  
Contributed by: Jing Sun, jingsun@umich.edu

Post-doctoral position opening in control and optimization of connected vehicles at the University of Michigan. We are seeking an outstanding post-doctoral researcher for powertrain control and vehicle dynamics for connected vehicles. The position is available from Jan. 2017 for up to three years. Candidates should have a strong research background in control and optimization, with hands-on experimental skills and experience. Familiarity with powertrain and vehicle simulation packages will be desirable.

To apply for the position, please send (1) a cover letter summarizing your interest, (2) CV, and (3) a list of at least three references, all in a single pdf file to

Professor Jing Sun  
NAME 211  
2600 Draper Road  
Ann Arbor, MI 48109  
Email: jingsun@umich.edu

6.10. PostDoc: Zhejiang University, China  
Contributed by: Peng CHENG, saodiseng@gmail.com

Postdoc Openings at NeSC Group, Zhejiang University, China

There are multiple postdoctoral positions available at the research group of Networked Sensing and Control (NeSC) with Zhejiang University (ZJU)(www.sensornet.cn), led by Prof. Youxian Sun, a member of the Chinese Academy of Engineering and Prof. Jiming Chen, Changjiang Scholars Chair Professor, MOE, China. NeSC is affiliated with Faculty of Information Technology, State Key Laboratory of Industrial Control Technology, and National Engineering Laboratory of Industrial Control System Security Technology.
With the goal of meeting the national strategical demand and addressing the frontier theoretical challenges, NeSC is currently focusing on Cyber-Physical Systems, Control System Security, Networked Estimation and Control, Network Optimization, as well Mobile Computing and Crowdsensing.

Qualifications:
1. A Ph.D. in well-known universities and research institutions in related fields;
2. Strong self-motivation and teamwork spirit;
3. Excellent publication record in related journals and conferences.

Positions:
Position 1: Cyber Security  
Position 2: Internet of Things  
Position 3: Big Data  
Position 4: Mobile Computing/Crowdsensing
If you are interested in the above positions, please send your CV and three representative papers to Dr. Chen. Successful applicants will receive annual salary ranging from $30000 to $45000 and will be provided with an apartment by the university at a discounted price.

Contact: Jiming Chen
Tel: (86) 0571-87951879
Email: cjm@zju.edu.cn

6.11. PostDoc: University of California at Berkeley, USA
Contributed by: Javad Lavaei, lavaei@berkeley.edu

Multiple postdoctoral positions are available in the Department of Industrial Engineering and Operations Research at University of California, Berkeley. The positions are on optimization theory, data science, energy systems, and distributed control. To apply, please email a CV along with sample research papers to Professor Javad Lavaei (lavaei@berkeley.edu).

6.12. PostDoc: Université de Lorraine, France
Contributed by: Samir Aberkane, samir.aberkane@univ-lorraine.fr

A Postdoctoral position is available in the CRAN laboratory (Centre de Recherche en Automatique de Nancy, UMR CNRS 7039) at Université de Lorraine (France) in the framework of the FUI project SPHEREAU.
Project title: Modeling and Control strategies for efficient water distribution network management
Summary:
Water distribution networks (WDN) are an essential component of nowadays urban patrimony. In the current context of aging infrastructures and cost optimization, their efficient management has become a priority in order to deliver a quality drinking water to the population and proposes a real challenge in order to minimize water losses and the associated costs as well as insuring an efficient management. In this context, the applicant will dispose of a real instrumented semi-rural WDN (over 10 communes) along with long series of measured data and his task in this project will be divided into two principal work packages:
1- The data-based modeling of the WDN: In this work package, it is intended to use system identification techniques in order to complement the traditional mechanistic models available.
2- The development of a decision tool based on the available models in order to:
   · Detect at an early stage system malfunctioning (leaks, sensor failures,...).
   · Propose control strategies in order to insure robustness against these malfunctioning.
   · Help WDN managers in their decision regarding water quality distribution throughout the network (future investment, control strategies for pumping and chlorination,... ).

Expected Qualifications, Skills and Experience:
- The applicant must be a ph. D. in Control, electrical engineering, computer science, applied mathematics or related fields.
- He must be competent in at least one of these fields: system identification, fault detection or control theory.
- Skills in PDE’s, Graph theory or water processes are an advantage.
- Strong self motivation, autonomy and teamwork spirit is compulsory.

Conditions:
- The project is granted by French FUI projects
- Expected to start: between June and September 2017
- Duration: 2.5 years
- Location: Nancy, France
- Centre de recherche en Automatique de Nancy (CRAN), UMR7039, Université de Lorraine
- Income: 2200 euros Netto/month

Send your application to: samir.aberkane@univ-lorraine.fr, vincent.laurain@univ-lorraine.fr

6.13. PostDoc: NC A&T State University, USA
Contributed by: Ali Karimoddini, akarimod@ncat.edu

The Testing, Evaluation, and Control of Heterogeneous Large Scale systems of Autonomous Vehicles (TECHLAV) Center, a DoD Center of Excellence in Autonomy at NC A&T State University, invites applications for a full-time, post-doctoral research associate position in Machine Learning for testing and evaluation of autonomous vehicles.

The project uses approximate reasoning and Fuzzy Type-2 approaches to develop and implement test and evaluation techniques for autonomy algorithms of autonomous vehicles. This is a non-tenure-track, year-to-year appointment, renewable annually for up to four years subject to satisfactory performance, availability of resources, and the needs of the Center. The research results of this project are expected to reach a high Technology Readiness Level (TRL) to be applied to testing and evaluation of autonomous vehicles. We thus look for applicants that have demonstrated track record in the applications of Machine Learning techniques to systems and control problems. Programming skills and practical experiences with embedded real-time systems are desired.

The candidate will also be working with both undergraduate and graduate students in a mentoring role, and will be involved in teaching relevant courses, conducting workshops, and seminars. The candidate will enjoy a dynamic and collaborative working environment. U.S. citizenship is preferred and minority candidates are strongly encouraged to apply. If interested, please apply electronically by sending a detailed curriculum vitae, copies of your top three publications, the summary of your PhD thesis, names and contact information of three references, and other information that might be relevant to your application to Dr. Karimoddini (akarimod@ncat.edu), Deputy Director of the TECHLAV DoD Center of Excellence in Autonomy.

Contributed by: Delphine Bresch-Pietri, delphine.bresch-pietri@gipsa-lab.fr

A post-doctoral position is available in GIPSA-lab (Grenoble, France) with stays at CAS, MINES ParisTech (Paris, France)

Advisors: Delphine Bresch-Pietri (GIPSA-lab), Florent Di Meglio (CAS, MINES ParisTech) and Christophe Prieur (GIPSA-lab)

Duration: One year, starting early 2017 (can be renewed depending on the obtained results)

Physical phenomena at stake in the context of oil drilling are especially complex. The goal of this post-doctoral position is to design, implement and compare suitable control strategies limiting structural vibrations. These control laws will be tested numerically in simulation with dynamical models of various complexity. Their relevance will also be evaluated in view of experimental tests produced on a scaled testbench at GIPSA-lab.
Application
The applicant should have a Ph.D. (or graduate with one soon) in control and dynamical systems or closely related areas. A prior experience in the area of Partial Differential Equations or Delay Systems is recommended but not mandatory. She/he should also be familiar with programming in Matlab and realtime experiments.
Application must include a detailed resume, the preprints of the two most significant publications and two references who may be asked to provide letters of recommendation.

6.15. PostDoc: KTH, Sweden

Contributed by: Håkan Hjalmarsson, hakan.hjalmarsson@ee.kth.se

1 PostDoc: KTH, Sweden
The Department of Automatic Control at KTH conducts fundamental and applied research in system identification, optimization and control of wireless networks, networked systems, and systems theory. The department is internationally well established, has many research collaborations with excellent partners worldwide, and is involved in several European and national projects. Industrial projects involve partners such as ABB Corporate Research, ABB Process Automation, BillerudKorsnäs, Ericsson Research, and Scania. We have a large academic network and collaborate with researchers at MIT, Harvard University, UC Berkeley, Stanford, TU Eindhoven, and Université de Lyon among others.
The Automatic Control Lab at KTH has one open postdoc position for model based optimization in biopharmaceutical production by mammalian cell systems. We seek candidates with background from modeling of reaction networks, parameter estimation and off- and on-line optimization (Model Predictive Control), preferably with applications in bioproduction. The project is carried out in collaboration with the School of Biotechnology, KTH, and several industrial partners.
Candidates should have a Ph.D. or be near Ph.D. defense in Electrical Engineering, Chemical Engineering or Biotechnology. The candidate should have a strong background from at least one of the areas bioprocess modeling, system identification or Model Predictive Control, and experience from at least one more of these areas.
The successful applicant should have an outstanding research and publication record. Well-developed analytical and problem solving skills are a requirement. We are looking for a strongly motivated person, who is able to work independently. Good command of English orally and in writing is required to present and publish research results.
For more information and how to apply, see
Deadline for applications is Jan 22 2017.

6.16. PostDoc: Chalmers University, Sweden

Contributed by: Jonas Sjöberg, jonas.sjoberg@chalmers.se

PostDoc: Chalmers University, Gothenburg, Sweden
PostDoc position developing algorithms for autonomous vehicles
The main objective of this research is to develop and experimentally validate algorithms predicting the motion of surrounding moving objects. Such algorithms have to be developed to fit predictive decision-making and
control algorithms with safety guarantees. The successful candidate will be engaged in both fundamental and experimental research. In particular, the candidate will develop prediction algorithms and experimentally validate them off-line with real-world data and, if possible, on-line in full-scale vehicles. Strong theoretical and practical problem-solving capabilities are required.

More information, and instructions how to apply, can be found at [http://www.chalmers.se/en/about-chalmers/vacancies/Pages/default.aspx](http://www.chalmers.se/en/about-chalmers/vacancies/Pages/default.aspx)

Application deadline is December 31st.

6.17. Research Associate: Nanyang Technological University, Singapore

Contributed by: Erdal Kayaca, erdal@ntu.edu.sg

NTU: Research Associate position in the ST Eng-NTU Corp. Laboratory at Nanyang Technological University (Singapore) is immediately available.

Research topic: Intelligent Control of Unmanned Aerial Vehicles.

Research topic:
- High-level and low-level control of Y6 coaxial tricopter UAV.
- Soft computing methods including artificial neural networks, fuzzy logic theory and adaptive neuro-fuzzy systems.

Requirements:
- Prospective candidate should hold a M.Sc. in automatic control engineering, mechatronics engineering, electrical engineering, mechanical engineering, computer science or other related disciplines from reputable universities.
- The candidate should have excellent verbal and writing skills in English with very good communication skills.
- Experience in controlling multi-rotor UAVs.
- Concrete knowledge in C/C++.

The application should consist of:
- A motivation letter,
- A CV with mentioning on projects that achieved during your study,
- Transcripts of B.Sc. and M.Sc.,
- The contact details of two referees.

These documents must be compiled as a single pdf file, and named as "<Name><Surname>.pdf". Then, the single file should be sent to "erdal@ntu.edu.sg" with a subject line of "RA application for FNN project".

The salaries are competitive, and the position will be available immediately once the candidate is selected. The applications will be reviewed directly until the position is filled.

6.18. Research Associate: University of Newcastle, Australia

Contributed by: Rochelle Feenan, rochelle.feenan@newcastle.edu.au

Faculty of Engineering & Built Environment
School of Engineering
About UON
Built on the principles of equity, excellence and engagement, the University of Newcastle (UON) has a reputation as a world-class institution making an impact within our regions, throughout Australia and across the globe. This is an exciting time to be part of the University of Newcastle as we embark on our NeW Futures Strategic Plan 2016-2025. We are building on strong foundations to realise our 2025 vision to stand as a global leader, distinguished by a commitment to equity and excellence, creating a better future for our regions through innovation and impact. Being part of a university on the move gives our people the opportunity to really make a mark in their chosen field.

The Faculty of Engineering and Built Environment is one of the leading faculties of its kind in Australia. We have achieved outstanding results in the Australian Research Council ERA research excellence ratings, being the only university to achieve the highest possible rating of '5' in Civil Engineering across all three ERA assessments (2010, 2012 and 2015), and one of only two to achieve a 5 in Electrical and Electronic Engineering across all three ERA assessments, and a 5 in Resources Engineering and Extractive Metallurgy. Our position as one of the most highly ranked engineering faculties in Australia is recognised through our associate membership of the Group of Eight.

About the role
Dedicated to research and training in the disciplines of Chemical, Civil, Environmental, Mechanical and Mechatronics Engineering, and Surveying, the School of Engineering is currently seeking to appoint a suitably qualified Research Associate at Level B within the Discipline of Mechanical and Mechatronics Engineering on a full-time fixed-term basis for three years.

Specifically, you will:
- Demonstrate educational leadership in Teaching and Learning at the course level and contribution to the program level by:
  - Actively participating in the teaching programs of the School
  - Developing course materials in collaboration with other academics in the School
- Collaborate with colleagues to contribute to the University and its academic community;
- Contribute to the School and/or Faculty governance by proactively participating in initiatives/activities;
- Build research productivity and develop recognition for academic staff, including generating quality publications, relative to opportunity;
- Attract research higher degree students to the discipline. Effective co-supervision of research masters and RHD students, and co-publication with RHD candidates;
- Active participation in research collaborations and engage in industry networking.

Skills and experience
To be successful in this role, you will have:
- A PhD in Electrical or Mechatronics Engineering.
- Extensive experience in the development and application of system identification and estimation methods for dynamic systems.
- A track record of research excellence demonstrated through quality publications.
- Demonstrated capability to deliver undergraduate teaching in the field of Mechatronics
- Capacity to supervise Master and PhD students
- Good interpersonal skills and a demonstrated ability to work in a collaborative team.
- Well-developed organisational and project management skills
Academic Level B – $92,574 to $109,933 per annum. Superannuation Guarantee contributions will be made to Unisuper with this appointment.

Applications close: Friday 6 January 2017

For more information about the position including selection criteria please go to http://www.newcastle.edu.au/about-uon/jobs-at-uon/job-vacancies

6.19. Lecturer: Paderborn University, Germany
Contributed by: Burak Demirel, burak.demirel@upb.de

The Automatic Control Group (Prof. Daniel Quevedo) in the Department of Electrical Engineering at the Paderborn University is seeking a Lecturer (Akademische Rätin/ Akademischer Rat auf Zeit).

This is a full-time position, initially limited to three years, with the possibility of further extensions. The position is available immediately.

Your duties and responsibilities:

The candidate will be actively involved in research projects of the Automatic Control Group and also support some of its teaching activities.

Our current research interests lie in networked estimation and control, including topics such as control with limited communication or computation resources, event-driven feedback, energy harvesting, distributed architectures, security, and privacy. For further information on our activities, see http://control.upb.de

Your profile:

- Applicants must have received a doctoral degree in electrical engineering or a related field and have a proven capacity for high-quality research.
- Fluency in English and German is required.

We offer a stimulating work environment in an international team and an attractive remuneration package according to pay scale A13 of the German public service (approx. EUR 4,000/month).

Applications from women are particularly welcome and, in the case of equal qualifications and experience, will receive preferential treatment according to state law (LGG). Qualified disabled people (in the sense of the German social law SGB IX) are also encouraged to apply. The applicant may choose to have the staff council (WPR) involved in his/her appointment.

Please send your application (including a cover letter, your CV, list of publications, and contact details of three referees) to Ines Kaiser, ines.kaiser@upb.de by 15. January 2017. In your application, please mention the reference no. 2767.

6.20. 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

6.21. **Faculty: University of California at Santa Cruz, USA**

Contributed by: Qi Gong, qigong@soe.ucsc.edu

The Department of Applied Mathematics and Statistics (AMS) in the Jack Baskin School of Engineering at University of California, Santa Cruz (UCSC) invites applications for a tenure-track position in Control Systems at the Assistant Professor level. We seek outstanding applicants whose research complements our existing strengths in control theory, stochastic modeling, and uncertainty quantification. We are particularly interested in candidates who have expertise in control of stochastic systems and its applications in areas, such as autonomous vehicles, power systems, biology, network systems, economics, or other related fields.

The successful candidate will be expected to develop and maintain first-class, externally-funded research programs; to teach, mentor, and advise students at the graduate and undergraduate level individually and in the classroom; to contribute significantly to graduate education; and, to perform university and professional service. The candidate must be able to work with students, faculty, and staff from a wide range of social and cultural backgrounds. We are especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching, and service.

The Department of Applied Mathematics and Statistics is a dynamic and growing department with fourteen faculty, six in applied mathematics and eight in statistics. Our graduate program has approximately 50 students. Research and instruction are supported by excellent computing facilities and state-of-the-art laboratories. There are strong opportunities to collaborate with colleagues in the other departments in the Baskin School of Engineering, including Computer Engineering, Computer Science, Electrical Engineering, Biomolecular Engineering, Technology Management, and Computational Media. More widely, our campus offers a fertile environment for scientific research in mathematical, physical, biological, and social sciences.
Given the proximity of the campus to Silicon Valley, there are multiple opportunities for collaboration with investigators working on cutting edge engineering and science problems in institutions (for example, NASA Ames, Lawrence Livermore National Laboratory) and high-tech companies in the area.

BASIC QUALIFICATIONS: Ph.D. or equivalent foreign degree in Applied Mathematics or Control or closely related or relevant field expected to be conferred by June 30, 2017. Teaching experience (demonstrated by college level teaching experience, TA experience, research presentations and/or professional training seminars). Demonstrated record of research and publication.

PREFERRED QUALIFICATIONS: University teaching experience, graduate student mentoring experience, demonstrated record of research excellence and productivity, participation and achievement in professional or university organizations, and a record of honors or awards.

POSITION AVAILABLE: July 1, 2017 (with academic year beginning September 2017). Review of applications will begin on December 9, 2016. To ensure full consideration, applications should be complete – including letters of recommendation received – by this date. The position will remain open until filled, but not later than 6/30/2017.

Apply at https://recruit.ucsc.edu/apply/JPF00390

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6.22. Faculty: University of California at Santa Cruz, USA

Contributed by: Ricardo Sanfelice, ricardo@ucsc.edu

The Department of Computer Engineering at the University of California, Santa Cruz (UCSC) invites applications for a position at the Assistant Professor (tenure-track) level. We seek outstanding applicants with appropriate expertise, established records, and exceptional potential for research in Robotics. We are particularly interested in candidates with expertise in robotic manipulation, grasping, haptics, and dexterous manipulation with applications to service robotics, autonomous transportation, assistive and medical robotics, or other related areas. Complementarity of research to the other areas of computer engineering, including networks, sensors, control systems, and computer hardware, will be evaluated.

The successful candidate will join our vibrant program in Robotics and Control, that has been active for over a decade and includes an undergraduate Robotics Engineering degree program, and will be expected to maintain an active research program, obtain external funding, teach undergraduate and graduate courses in Computer Engineering, mentor and advise students at the graduate and undergraduate level, and perform University and professional service. The successful candidate must be able to work with students, faculty and staff from a wide range of social and cultural backgrounds. We are especially interested in candidates who can contribute to the diversity and excellence of the academic community through their teaching, research, and/or service.

RANK: Assistant Professor.

SALARY: Commensurate with qualifications and experience, academic year (9-month) basis.

BASIC QUALIFICATIONS: Ph.D. or equivalent foreign degree in computer engineering, computer science, electrical engineering, or closely related field expected to be conferred by June 30, 2017; demonstrated record of research and publication; and teaching experience (demonstrated by college level teaching experience, TA experience, research presentations or professional training seminars).

POSITION AVAILABLE: July 1, 2017, with academic year beginning Fall 2017. Degree must be conferred by June 30, 2018 for employment beyond this date.
TO APPLY: Applications are accepted via the UCSC Academic Recruit online system, and must include: (1) letter of application; (2) curriculum vitae; (3) statement of research interests and research plan; (4) statement of teaching interests and experience; (5) three to five samples of published materials; (6) three to five confidential letters of reference.* Applicants are invited to submit a statement addressing their contributions to diversity through research, teaching and/or service. Documents/materials must be submitted as PDF files. More details at http://apo.ucsc.edu/academic_employment/jobs/JPF00388-17.pdf

Apply at https://recruit.ucsc.edu/apply/JPF00388

Refer to Position #JPF00388-17 in all correspondence.

CLOSING DATE: Review of applications will begin on December 18, 2016. To ensure full consideration, applications should be complete and letters of recommendation received by this date. The position will remain open until filled, but not later than 6/30/2017.

6.23. Faculty: Louisiana State University, USA
Contributed by: Marcio de Queiroz, mdeque1@lsu.edu

Assistant Professors of Mechanical Engineering (Tenure-Track) Louisiana State University

The Department of Mechanical and Industrial Engineering (MIE) at the Louisiana State University (LSU) continues its significant growth of faculty. The Department is currently seeking excellent applicants to fill two tenure-track positions in Mechanical Engineering.

The College of Engineering (CoE) at LSU is experiencing a period of unprecedented growth, which includes an investment of a $110M in a new engineering complex, a result of a public-private partnership.

The CoE actively encourages interdisciplinary research including, but not limited to, Advanced Manufacturing and Materials, Energy, and BioTechnology. Depending on their background, new hires will have the opportunity to leverage the resources and collaborative environments of the CoE, the National Center for Advanced Manufacturing (NCAM - http://ncam.eng.lsu.edu/), the recently NSF-funded ($20M over 5 years) Consortium for Innovation in Manufacturing and Materials (CIMM), the Institute for Advanced Materials (IAM), the Center for Computation and Technology (CCT - https://www.cct.lsu.edu/), as well as partnerships with IBM and ANSYS.

The MIE Department realizes Mechanical and Industrial Engineering education, research and scholarship. It aspires to advance professional frontiers within a creative, multi-disciplinary and diverse atmosphere that promotes discovery, creativity and innovation. It is the largest of seven departments in the CoE and is currently home to 25 Mechanical Engineering faculty, 8 Industrial Engineering Faculty, and a vibrant undergraduate and graduate student body. The faculty conduct funded research across a broad spectrum of traditional and emerging areas.

The Department offers separate B.S., M.S., and Ph.D. degree programs in both Mechanical Engineering and Industrial Engineering. Further information on the Department can be found at: http://www.mie.lsu.edu/. Duties of the positions include undergraduate and graduate level teaching and providing associated service; initiating and sustaining independent, externally-funded research leveraging their specialty area, and supervising graduate students.

Successful candidates are expected to develop substantive collaborations across departmental and college boundaries, engage industry and develop activities supporting the State's economic development efforts.
Job Requirements:
Successful candidates will possess a Ph.D. in Engineering or a related scientific field (ABD candidates will be considered if degree will be obtained by August, 2017), with at least one degree in Mechanical Engineering. Please see position descriptions online for additional information regarding qualifications.

General Area: Robotics
The successful candidate will have the opportunity to join a growing Robotics Team and support a recently introduced multidisciplinary Robotics Minor in the College of Engineering.
Required Qualifications: At least one degree in Mechanical Engineering, with a Ph.D. in Engineering or related scientific field (ABD candidates will be considered so long as degree requirements are met prior to August, 2017); at least four years of experience, including graduate study; experience with robotics.
Preferred Qualifications: Background in any area of robotics is welcome, including but not limited to: industrial robotics, collaborative robotics, integrated human robotics (e.g., assistive and wearable robotics), autonomous vehicles, subsea robotics, and medical robotics.

OR

General Area: Advanced Manufacturing
The successful candidate will have the opportunity to join a growing Manufacturing and Materials Team and contribute to developing a Manufacturing Minor in the College of Engineering.
Required Qualifications: At least one degree in Mechanical Engineering, with a Ph.D. in Engineering or related scientific field (ABD candidates will be considered so long as degree requirements are met prior to August, 2017); at least four years of experience, including graduate study; experience with advanced manufacturing.
Preferred Qualifications: Background in any area of advanced manufacturing in metals/alloys is welcome, including but not limited to: additive manufacturing, intelligent manufacturing, digital manufacturing, friction stir welding and their applications. Experimental and/or modeling experience are equally welcome.

For the position in either Robotics or Advanced Manufacturing, apply online at: https://lsu.wd1.myworkdayjobs.com/LSU/job/LSU—Baton-Rouge/Assistant-Professor-of-Mechanical-Engineering-in-Advanced-Manufacturing-or-Robotics–Tenure-Track–R00007021
Applications will be accepted until the positions are filled and those received before February 1, 2017 will be guaranteed full consideration.

6.24. Faculty: Louisiana State University, USA
Contributed by: Michael Malisoff, malisoff@lsu.edu

The Department of Mathematics at Louisiana State University invites applications for one or more Post-doctoral Researcher position in any area of interest to the departmental faculty, including control and optimization.
Required Qualifications: Ph.D. or equivalent degree in mathematics or a related area.
Additional Qualifications Desired: Mathematical scientists who have potential for research excellence as well as a commitment to graduate and undergraduate education.
Application review will begin upon receipt and applications will be accepted until candidates are selected. Applications should include the AMS Standardized Application Form. Minorities and women are strongly encouraged to apply. To apply, we request that applicants use the secure AMS online application system AMS MathJobs, by following the link https://www.mathjobs.org/jobs/jobs/9626.
6.25. Faculty: Loughborough University, UK
Contributed by: Wen-Hua Chen, w.chen@lboro.ac.uk

There are two Lecturer positions available (equivalent to Assistant Professor in the North America) in the Department of Aeronautical and Automotive Engineering at Loughborough University, UK. Any candidates with background in unmanned aerial/ground vehicles, robotics, autonomous systems, driver assistant systems and intelligent transport systems are welcome to apply. These are permanent positions subject to three year probation.

Job reference: REQ16726 and REQ16724
Date posted: 07/10/2016
Application closing date: 02/12/2016
Location: Loughborough
Salary Package: Research Teaching and Enterprise grade 7 from £39324 to £46924 per annum.

Job description
Aeronautical and Automotive Engineering are looking to recruit a Lecturer in Intelligent Mobility and a Lecturer in Intelligent/Autonomous Vehicles. The Department has identified intelligent mobility as an important area for growth and this post forms part of the department’s long term investment to expand its capability and to strengthen Loughborough’s growing reputation in this area. We are interested in candidates that can demonstrate that their research activity complements one or more of our existing research strengths and also show a clear research direction in intelligent mobility. We are therefore interested in candidates from a range of backgrounds including, for example autonomous vehicles, autonomous functions, intelligent powertrain optimisation, the application of information and computer technology to vehicles and powertrains, powertrain integration. We are particularly interested in candidates with the vision to expand the research into the growing areas of intelligent and smart vehicles and systems. The candidates will have expertise in one or more relevant fundamental disciplines that complement and add to our existing research capabilities.

Informal enquiries are welcomed and should be made to Professor Martin Passmore, Head of Department, Aeronautical and Automotive Engineering by email at m.a.passmore@lboro.ac.uk or by telephone on +44(0)1509 227250.

Application closing date: 2 December 2016.
For more details, please follow the links below
https://vacancies.lboro.ac.uk/jobdesc/REQ16726.pdf
https://vacancies.lboro.ac.uk/jobdesc/REQ16724.pdf

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.

Washington University in St. Louis is an Equal Opportunity and Affirmative Action employer, and invites applications from all qualified candidates. Employment eligibility verification required upon employment.

6.27. Faculty: University of Texas at Dallas, USA
Contributed by: Mario Rotea, rotea@utdallas.edu

Open Rank Faculty Positions in Mechanical Engineering
The University of Texas at Dallas

The Erik Jonsson School of Engineering and Computer Science at The University of Texas at Dallas (UTD) invites applications for multiple faculty positions in Mechanical Engineering at the rank of Assistant, Associate, or Full Professor.

Candidates must have a strong commitment to undergraduate and graduate education and strong potential to develop an externally funded research program. Candidates for the positions at the associate or full professor levels must have strong records of scholarly and professional achievements.

Applications will be considered in dynamic systems & control, manufacturing & design innovation, mechanics & materials, and thermal & fluid sciences. Application domains of interest include, but are not limited to: renewable energy and storage, emerging technologies for design and manufacturing with application to health care and nanotechnology, mechatronics and robotics with applications to health care, nano/micro- and biomechanics, and thermal transport and management. Applicants with experience in engineering education and the professional formation of engineers are of interest as well.

The Department of Mechanical Engineering is among the fastest growing programs at UTD. The department was established in 2008 and currently has over 1000 students enrolled, including 184 graduate students. The department has 26 tenured-system faculty members and 6 senior lecturers. The department offers ABET-accredited BS, as well as MS and PhD degree programs in mechanical engineering. In 2018, the department will be housed in a brand new building with 200,000 square feet for teaching and research.
The research conducted by graduate students and faculty is focused on problems of global significance with regional impact in medicine, energy, and nanotechnology. The department is home to an NSF Industry/University Cooperative Center in Wind Energy. Faculty in the department work in collaboration with the UT Southwestern medical school to solve problems in robotics, assistive devices, and detection of diseases. The junior faculty are highly decorated and include two NSF CAREER awardees, five Young Investigator Program awardees from DoD, and one awardee of the NIH Director’s Program.

In addition to Mechanical Engineering, the Erik Jonsson School is home to the Departments of Bioengineering, Electrical Engineering, Computer Science, Materials Science & Engineering, and Systems Engineering, and has interdisciplinary degree programs in Telecommunications Engineering, Computer Engineering and Software Engineering. Opportunities for interdisciplinary research are outstanding. Located in North Texas, with hundreds of technology, large defense manufacturing, and systems integrations companies, Jonsson School students have ample opportunities for real-world, hands-on experiences. Companies and organizations such as Raytheon, General Dynamics, Medtronic, PepsiCo/Frito-Lay, Texas Instruments, and UT Southwestern Medical Center participate in Mechanical Engineering’s UTDesign, the Jonsson School’s award-winning and corporate-sponsored capstone senior design program. Opportunities exist to further the relationships developed through UTDesign to develop joint research projects with industry.

Review of applicants will begin immediately and will continue until the positions are filled. Indication of gender and ethnicity for affirmative action statistical purposes is requested as part of the application.

To apply for this position, applicants should submit (a) their current curriculum vitae, (b) letters of research and teaching interests, and (c) letters of recommendation from three academic or professional references via the on-line application form available at http://jobs.utdallas.edu/postings/6977. Additional references may be requested if deemed necessary. Applicants must choose one of the following as their main area of technical competence: dynamic systems & control (DSC), manufacturing & design innovation (MDI), mechanics & materials (MM), or thermal & fluid sciences (TFS).

The University of Texas at Dallas is an Equal Opportunity / Equal Access / Affirmative Action Employer committed to achieving a diverse and inclusive community.

6.28. Faculty: University of Connecticut, USA
Contributed by: Abhishek Dutta, abhishek.dutta@uconn.edu

The Eversource Energy Center (EEC) at the University of Connecticut (UConn) solicits applications for a full-time tenure-track faculty position at the rank of Assistant or Associate Professor, open to all School of Engineering Departments to conduct research, education and outreach related to Predictive Analytics for Infrastructure Resilience. The successful candidate will lead Eversource Energy Center’s research programs that combine predictive analytics, modelling and optimal control for (i) predicting infrastructure damages due to storms and other related emergency events and (ii) assessing social and economic benefits of improving emergency preparedness and resiliency programs. The research is expected to lead to transformative commercial products and services that enhance reliability and promote public understanding of energy infrastructure needs and resilience programs.

The targeted faculty research expertise will focus on areas such as:
- Advanced statistical modeling and geospatial data processing;
- Infrastructure impact modeling;
- Economic analysis of resilience programs;
- Climate change impacts on the evolution of storm hazards and exposure.
The successful candidate will lead research collaborations with the School of Engineering, the College of Agriculture, Health and Natural Resources and the School of Business faculty encompassing in their research the built and natural environment, forecasting of climate and hydro-meteorological extremes, other data and technologies (e.g. remote sensing technologies, crowdsourcing, structural modeling etc.) and the economic dimensions of risk management and resiliency.

Minimum Qualifications
1. Completion of all requirements for a Ph.D. in Engineering or related discipline by the time of the appointment.
2. Demonstrated success in original research, and publication of that work in archival journals focused on topics such as predictive analytics and resilience.
3. A proven ability to excel in teaching undergraduate and graduate courses in Engineering, including software and system design methodologies; demonstrated potential in establishing a successful research and scholarship.
4. Excellent oral and written communication skills.
5. Senior candidates at associate professor level should have established significant research programs with a track record of external funding as well as demonstration of a leadership role for nationally competitive research grants.
6. A commitment to diversity and excellence of the learning experience.

To Apply
Please visit Husky Hire at http://hr.uconn.edu/jobs/ to submit your CV/resume; 3 references; a statement of research and teaching statement (including teaching philosophy, teaching experience, commitment to effective learning, concepts for new course development, etc.); research and scholarship statement (innovative concepts that will form the basis of academic career, experience in proposal development, mentorship of graduate students, etc.); and a commitment to diversity statement (including broadening participation, integrating multicultural experiences in instruction and research and pedagogical techniques to meet the needs of diverse learning styles, etc.). Evaluation of applicants will begin immediately and continue until the position is filled. Employment of the successful candidate will be contingent upon the successful completion of a pre-employment criminal background check (Search # 2017248).

6.29. Faculty: University of California at Berkeley, USA
Contributed by: Roberto Horowitz, horowitz@berkeley.edu

Faculty Position: The DEPARTMENT OF MECHANICAL ENGINEERING, University of California, Berkeley, seeks applications for a tenure track, Assistant Professor position in the areas of Design, Robotics, Applied Energy Systems, and Nanoscale Systems Engineering. Topics of specialization within these areas include, but are not limited to: Design methods and innovation; flexible automation, human-robot interaction, and autonomous robots; combustion and primary energy conversion processes, energy-efficient processes with basis in thermodynamics and heat transfer; and nanoscale mechanics, materials, heat transfer, process, and manufacturing, along with the appropriate analytical and computational capabilities. Specific applications of interest include: Smart Manufacturing Systems (e.g., modeling, simulation, monitoring, and control, novel additive and subtractive manufacturing processes, robotic-based flexible assembly and manufacturing); Personalized Health and Well-being (e.g., smart and personalized healthcare, health diagnosis, monitoring and maintenance, robot-based human assistance, smart rehabilitation and exercise technologies); Energy Efficiency, Sustainability and Climate Change Resilience (e.g., alternative energy technologies, ef-
ficient, sustainable and resilient water, food and energy production and distribution); Aerospace Systems (e.g., propulsion, flying cars and personal air vehicles, nano-satellites, and space robotics); and Intelligent and Connected Devices (e.g., product design, sensing, diagnostics and embedded systems).

To apply, please go to the following link, https://aprecruit.berkeley.edu/apply/JPF01192 and submit a cover letter, curriculum vitae, statement of research, statement of teaching, one required publication, and two optional publications.

For questions regarding this position, please contact: Debra Chin, debramchin@me.berkeley.edu

6.30. Faculty: University of Groningen, Netherland

Contributed by: Bayu Jayawardhana, b.jayawardhana@rug.nl

The Engineering and Technology institute Groningen (ENTEG) of the Faculty of Mathematics and Natural Sciences has a vacancy for a tenure track assistant professor in the field of Smart Micro Energy Systems. The candidate is expected to initiate a research line on research activities that are related to the miniaturization of energy harvesting systems using piezoelectricity. It includes the embedding of such systems in a MEMS device, thus taking a mechatronics design perspective, and deals with research activities on micro transduction technology, on rectification systems (which is the processing of the AC outputs of energy harvesting systems into regulated low voltage DC, suitable for powering an ultra-low power sensor node), as well as, on micro power management systems.

The candidate is expected to set up his/her own research group in the field of smart micro-energy systems. This includes obtaining research grants and supervision of PhD students.

In addition, the candidate will contribute 30% of her/his time to the teaching programmes at the University of Groningen, in particular the bachelor and master programmes in Industrial Engineering and Management, Applied Physics , the bachelor programme in Life Science and Technology with a major in Biomedical Technology , the master programme in Biomedical Engineering and new master’s degree programmes in Engineering that are under development. It is also expected that the candidate will contribute to the specialization of Advanced Production Engineering and/or of Smart Systems in Control and Automation within the master’s degree programme in Industrial Engineering and Management.

The candidate is expected to have an active interest and to provide a positive contribution to the management and organizational tasks of the institute. At the level of the FMNS, the candidate will contribute to the organization of the faculty, for example by participating in working groups and committees, in the fields of teaching, research and management. The candidate will participate in relevant national and international organizations.

The University of Groningen is an equal-opportunity employer. Female candidates are encouraged to apply.

Requirements

You have:

- PhD in Mechanical Engineering, in Electrical and Electronics Engineering, in Material Science or in Engineering Physics / Applied Physics
- at least two years postdoctoral experience abroad (with possibility of including industrial experience)
- excellent research qualities, as evidenced by a publication record in international peer-reviewed journals and renowned conferences, and a relevant international network
- teaching and organizational experience appropriate to career stage
- evidence of successful acquisition of external funding appropriate to career stage.
Additionally, it is expected that you are:

- a team player with good communications skills
- willing to fulfill the requirements for the University Teaching Qualification
- willing to learn the Dutch language (while teaching itself is conducted in English).

Conditions of employment

The University of Groningen offers a gross monthly salary dependent on qualifications and work experience from EUR 3,427 (salary scale 11 Dutch Universities) up to a maximum of EUR 5,330 (salary scale 12) gross per month for a fulltime position. The appointment will be initially for a maximum of 6 years at the level of tenure track assistant professor. After 5 years there will be an assessment of performance based on established criteria. If the outcome of the assessment is positive, the assistant professor will be promoted to associate professor with tenure. There will be another assessment at the end of a further 4-7 -year period for the promotion to full professor.

In addition to the primary salary the University offers 8% holiday allowance and an end-of-year bonus of 8.3

The University of Groningen provides career services for partners of new faculty members moving to Groningen.

The University of Groningen has adopted an active policy to increase the number of female scientists across all disciplines of the university. Therefore, female candidates are especially encouraged to apply.

Application

You may apply for this position until 16 January / before 17 January 2017 Dutch local time through the following link:

Interested candidates are invited to submit a complete application including:

- a letter of motivation
- a curriculum vitae, including a list of publications
- a list of five self selected ‘best papers’
- a statement about teaching goals and experience and a description of scientific interest and plans
- the names of three references complete with title and contact information.

Department

Faculty of Mathematics and Natural Sciences

Since its foundation in 1614, the University of Groningen has enjoyed an international reputation as a dynamic and innovative center of higher education offering high-quality teaching and research. Study and career paths in a wide variety of disciplines encourage currently more than 30,000 students and researchers to develop their individual talents. Belonging to the best research universities in Europe, the top 100 universities in the world and joining forces with prestigious partner universities and networks, the University of Groningen is truly an international place of knowledge.

Within the Faculty of Mathematics and Natural Sciences (FMNS), the Engineering and Technology institute Groningen (ENTEG - www.rug.nl/research/enteg/) conducts engineering science research and covers a broad area of mechanical engineering, electrical engineering, chemical engineering, biotechnology and information technology. The research unit Discrete Technology and Production Automation (DTPA) is focused on the dynamical modeling, analysis and systems engineering of complex electro-mechanical systems. The application areas include smart energy systems, mechatronic systems, robotic systems, as well as, multi-agent autonomous systems.

Additional information
6.31. Faculty: KU Leuven, Belgium
Contributed by: Steffen Waldherr, steffen.waldherr@kuleuven.be

There is a full-time faculty vacancy at KU Leuven (Belgium) in the Science, Engineering and Technology Group, Faculty of Engineering Technology, Department of Chemical Engineering, Process and Environmental Technology Lab (PETLab) within the area of simulation and (thermal) optimization of chemical processes. We are looking for internationally oriented candidates with an excellent applied research record and with educational competence within the field of chemical engineering, including the domain of (chemical) thermodynamics.

You develop an industry oriented research programme at an international level in the simulation of chemical processes, with a clear link to the (thermal) optimisation of chemical production plants. A non-exhaustive list of examples is: thermal separation processes (such as distillation), mass and heat transfer in chemical reactors, mixing optimization and flow behaviour. Your work is supported by computational fluid dynamics and advanced process simulation software, which you will use as tools to study and design complex processes.

You should hold a PhD in Chemical Engineering, Bioscience Engineering, Engineering Technology or any field that prepares equally well for the research programme. You are expected to have an excellent track record in applied research in the field of this vacancy as reflected by your academic or industrial experience. Additionally, you have demonstrable teaching and training skills. International research and education experience is highly appreciated. Proficiency in English is required.

Depending on your record and qualifications, you will be appointed to or tenured in one of the grades of the senior academic staff: assistant professor, associate professor, professor or full professor. In principle, junior researchers are appointed as assistant professor on the tenure track for a period of 5 years; after this period and a positive evaluation, they are permanently appointed (or tenured) as an associate professor. You will work at the Technology Campus De Nayer, Sint-Katelijne-Waver.

More information and instructions how to apply can be found on the official vacancy site of KU Leuven at http://icts.kuleuven.be/apps/jobsite/vacatures/53913029.

The deadline for application is January 31, 2017.
Applicants must have earned a PhD in a relevant area of engineering. Successful applicants must demonstrate an outstanding record of high quality scholarship, a strong potential to attract external funding and commitment to teaching. Candidates should send a cover letter, statement of teaching and research interests, goals and accomplishments, curriculum vitae and a list of five references. Qualified applicants should apply online at http://jobs.uh.edu/postings/32515

6.33. Faculty: University of Minnesota, USA
Contributed by: Murti V Salapaka, murtis@umn.edu

Electrical and Computer Engineering, University of Minnesota - Twin Cities, invites applications for multiple faculty positions.

The search areas particularly relevant to the Control Systems Society include
(1) Control Systems
(2) Embedded systems, robotics and automation as part of the MnDRIVE Initiative (https://mndrive.umn.edu/robotics).

The Control systems and the Embedded systems, robotics and automation (MnDRIVE) positions invite applications at all ranks.

Positions are open until filled, but for full consideration, apply online by December 15, 2016.

Comprehensive details on the faculty search and how to apply can be found at http://ece.umn.edu/research/open-faculty-positions/

6.34. Engineer: Intel, USA
Contributed by: Martin W. Braun, martin.w.braun@intel.com

This position involves development and implementation of visual inspection platforms and metrology tools that provide defect detection and measurement capabilities for the assembly/test processes of Intel Corp. The work includes applying various image processing and analytical methods to precisely meet the inspection requirements. Of special interest are novel techniques tied to variational segmentation, classification methodologies, 3-D image processing techniques, and texture analysis. In addition to image analysis, responsibilities include working with process owners to determine next-generation analysis capabilities; interacting with software engineers to integrate new techniques into automation systems; and designing/modifying hardware and associated systems to enable new imaging technology for the analysis.

Minimum Qualifications:
You must possess the minimum qualifications to be initially considered for this position. Experience would be obtained through your educational level research and/or relevant job/internship experiences.

Recent Master of Science, or PhD in electrical engineering, computer science or similar discipline. Candidates close to graduation will be considered for this position, but you must graduate before you are hired.

Preferred Qualifications:
• Experience applying Matlab and OpenCV to meaningful research and practical engineering problems in the area of image processing.
• Work or educational experience in the following areas: image analysis, signal processing, or systems and control theory.
• Experience with 3-D image processing techniques, texture analysis variational segmentation and classification methodologies.
• Experience coding in C++/C# is a plus.
• Experience designing hardware in standard CAD packages is a plus.