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MESSAGE FROM THE CHAIR

By Ellen J. Bass, Ph.D., Drexel University
CEDM Technical Group Chair

To everyone who participated in the HFES meeting in San Diego, let’s give one more round of kudos to all of the presenters, organizers, reviewers, and session chairs and co-chairs for another stimulating conference. In total there were twenty technical sessions (including a poster and demonstration interactive session, four co-sponsored sessions with the Human Performance Modeling (HP), one with General Sessions, and one with the Perception and Performance Technical Groups (TGs), five discussion panels and one invited symposium).

I would especially like to thank Jennifer Ockerman, Karen Feigh, and Miranda Cornelissen for ensuring another high quality program with a good mix of topics and excellent papers including many from students. I would like to thank Cleotilde Gonzalez and Joachim Meyer for organizing the discussion panel on “Trends in Decision Making Research: How Can They Change Cognitive Engineering and Decision Making in Human Factors?” I would also like to thank Amy Bisantz for organizing the discussion panel on “Cognitive Engineering Across Domains: What the Wide-Angle View can Provide”, Jeffrey Morrison for organizing the discussion panel “The Quest for Anticipatory Decision Support Systems”, Judith Orasanu for organizing the discussion panel on communication in remote teams, Priya Pennathur for organizing the discussion panel on “Bridging the Gap between Cognitive System Engineering Analysis, Design, and Practice” as well as Rebecca Grier for organizing the invited symposium on the system usability scale. Several people told me that they thought these sessions were the highlights of the program this year.

For those of you who attended the business meeting, I hope you enjoyed the socializing and the snacks at the start. Amy Bisantz presented an abbreviated set of business including that our TG has 819 official members and our LinkedIn group has 1991.

Amy Bisantz announced the current set of officers.

- **Technical Group Chair**: Ellen J. Bass, Drexel University
- **Technical Group Chair Elect**: Jennifer Ockerman, Johns Hopkins University Applied Physics Laboratory
- **Program Chair**: Karen Feigh, Georgia Tech
- **Program Chair Elect**: Mark Pfaff, Indiana University
- **Secretary & Treasurer**: Stephen Gilbert, Iowa State University
- **Newsletter Editor**: Zarrin Chua, Institut Supérieur de l’Aéronautique et l’Espace (ISAE)
- **Electronic Communications Director**: Farzan Sosangohar, University of Toronto
- **Student Awards & Affairs Officer**: Shi Cao, University of Michigan

Thank you Amy Bisantz, Lisa Jo Elliott, and Miranda Cornelissen for your service for our TG. Lisa Jo is the new Workshops Chair as part of the annual meeting’s technical program committee. I know she will do a fantastic job for the society. And I know that Lisa Jo, Amy and Miranda will continue to help the TG and the society in many ways.

Thank you to our Best Student paper awardees for giving brief presentations about their work at the business meeting as well as presenting as part of the technical sessions:

- **Michael P. Jenkins**, University at Buffalo (with co-authors Ann Bisantz, James Llinas, and Rakesh Nagi) “Investigating and Improving Network Visualizations’ Effectiveness at Supporting Human Sensemaking Tasks”
- **Travis J. Wiltshire**, University of Central Florida (with co-authors Daniel Barber and Stephen M. Fiore) “Towards Modeling Social-Cognitive Mechanisms in Robots to Facilitate Human-Robot Teaming”
- **Robert Deloatch**, University of Illinois at Urbana Champaign (with co-authors Amir Marmarchi, and Alex
- **James C. Won**, MIT Lincoln Laboratory and Tufts University (with co-author **Daniel J. Hannon**) “Influence of Resource Allocation on Teamwork and Team Performance Within Self Organizing Teams”

Congratulations again to our three Student Annual Meeting Travel Awardees: **Plinio Morita** (University of Waterloo), **Cyrus Foroughi** (George Mason University), and **Ganyan Sun** (University of New Brunswick).

Several announcements were made at the business meeting and I repeat them here for those who missed them:
- The *Journal of Cognitive Engineering and Decision Making* (JCEDM) is in its 6-7th year. Papers pending publication in 2014 are already available in OnlineFirst, with topics ranging from cognitive work analysis in healthcare to methods for modeling function allocation to resilience in high-risk work. Note that JCEDM papers are available free to all HFES members on [hfes.org](http://www.hfes.org) under Access Member Benefits. We welcome submissions from the CEDM community. Please feel free to contact the Editor at amy.pritchett@ae.gatech.edu.
- **Shi Cao** announced that mentoring is critical for the success of students and young faculty. We will be organizing a mentoring program within the CEDM TG. Watch for a request for volunteers for mentoring.

Thank you to all who attended the annual meeting and the business meeting!

Ellen ※

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**JOURNAL OF COGNITIVE ENGINEERING & DECISION MAKING**

**Special Issue of JCEDM – Humans and Automation: Next Steps**
*By Amy R. Pritchett, Ph.D.*
*JCEDM Editor*

The December issue of JCEDM (accessible at [http://edm.sagepub.com/content/current](http://edm.sagepub.com/content/current)) is a special issue edited by Steve Casner of NASA Ames, focusing on novel ways of better matching the capabilities of automation to the needs of the human operator, improving communication between human and machine, tackling the increasing complexity of automation, and finding ways to better integrate human factors into the design process. The four papers address these concerns:

- Taylor, Reinerman-Jones, Szalma, Mouloua, and Hancock examine the possibility that characteristics of the task or environment mediate, moderate, or even reverse the intended effects of automation. Particularly, automated systems can enjoy more success when they can tailor their assistance to support the operator when particular cognitive resources become overloaded or exhausted.
- Degani, Barshi, and Shafio address the challenges presented by automation systems that continue to grow in complexity through analysis of a particular aircraft accident in which the flight crew became estranged from the details of an abnormal situation that worsened as the flight progressed. Degani and colleagues propose methods by which we might design information displays that present users with a transparent interface that allows them to track what the automation does, yet without burdening them with unnecessary details of how it works.
- Hutchins, Weibel, Emmenegger, Fouse, and Holder begin with the idea that the success or failure of an automated system often hinges on our ability to understand the nuances of the human operator, the task, and the environment. These authors argue that, to do this, we need a way to study humans and their work settings more closely, in situations in which not only gross characteristics matter but where utterances, glances, subtle gestures, thoughts, and attitudes all steeped in the details of the work environment all may mean something significant. They introduce a tool that integrates many sorts of data in a single timeline that helps the researcher to explore how these happenings might be related.
- Mosier, Fischer, Morrow, Feigh, Durso, Sullivan, and Pop confront the same question of why “one size fits all” automation fails to consistently assist the human user. Mosier and colleagues consider how specific features of the task and the automation can affect the outcome when human and automation are paired, helping to explain why an automated system can help lower workload or raise awareness in one situation and not in another. ※

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**CEDM ON LINKEDIN & FACEBOOK**

*By Farzan Sasangohar*  
**CEDM TG Electronic Communications Director**

Since 2007, CEDM TG has been maintaining a LinkedIn page ([www.linkedin.com/groups/Cognitive-Engineering-Decision-Making-CEDM-44516/about](http://www.linkedin.com/groups/Cognitive-Engineering-Decision-Making-CEDM-44516/about)) to facilitate discussions and to promote networking among TG members and other
professionals, academics, and students interested in the field of CEDM. As of November 2013, the LinkedIn group has more than 2050 members. Members can post discussion topics, interesting news, and job announcements. To ensure proper usage of the media, the TG executives regularly monitor requests to join and posts.

Current trending topics on LinkedIn include:
• Navigating IRB when dealing with human-subject experiments
• Why the internet needs cognitive protocols
• Truth vs. knowledge

The LinkedIn page is also home to the CEDM TG Student Group, which currently has 47 members. This page is administered by CEDM’s Student Affairs Officer and is restricted to student members of the TG. We encourage all TG members to visit the LinkedIn page and invite the current members to post discussion topics and announcements.

TG also maintains a Facebook page (www.facebook.com/groups/7636301315/), which currently has 186 users. In addition, TG’s website (tg.hfes.org/cedm/) provides the most up to date TG news, job announcements, and access to the newsletter archive.

As a reminder, the CEDM-TG listserv is for announcements only. All discussions should be posted on LinkedIn. TG members who are not LinkedIn users but are interested to join can visit (www.linkedin.com/reg/join). Please note that the CEDM-TG does not control enrollment on the listserv and can neither add nor remove recipients. All members of CEDM are automatically added to the TG mailing list. Those wishing to leave the list must contact HFES Member Services (info@hfes.org). ※

**ANNOUNCEMENTS**

**2013 Naturalistic Decision Making Conference**
*By Gary L. Klein, Ph.D.*

The 2013 NDM conference, held in Marseille, France, was a great success.

The next NDM conference, NDM-12, will return to the U.S. Gary L. Klein, of the MITRE Corporation, is the conference organizer. The meeting will be held in Washington, DC, at MITRE headquarters. The exact dates have not yet been finalized, but the conference is expected to take place May/June 2015. ※

**HFES Honors Fellows and Awardees at Annual Meeting**
*From hfes.org*

The Human Factors and Ergonomics Society elected six Fellows on Tuesday, October 1, 2013, and bestowed eleven awards during the Opening Plenary Session of the 57th Annual Meeting in San Diego, California.

Newly elected Fellows:
• **Ann M. Bisantz**, Professor and Chair, Department of Industrial and Systems Engineering, University at Buffalo, SUNY
• **Gloria Lynn Calhoun**, Senior Engineering Research Psychologist AFMC, Air Force Research Laboratory
• **Kermit G. Davis III** Associate Professor, Department of Environmental Health, University of Cincinnati, Cincinnati, Ohio
• **Cleotilde Gonzalez**, Associate Research Professor and Founding Director, Dynamic Decision Making Laboratory
• **Ravindra S. Goonetilleke**, Professor and Associate Head, Dept. of Industrial Engineering and Logistics Management, Hong Kong University of Science and Technology (HKUST), Hong Kong
• **Robert Hoffman**, Research Scientist, Institute for Human and Machine Cognition Faculty Associate, Department of Psychology, University of West Florida

Awards:
• **Jerome H. Ely Human Factors Article Award**: Brian R. Ott, George D. Papandonatos, and Jennifer D. Davis of...
For more information, visit www.starwoodmeeting.com/Star

REGISTRATION OPEN
HFES 2014 International Symposium on Human Factors and Ergonomics in Health Care: Leading the Way!
Sheraton Chicago Hotel and Towers (Chicago, Illinois)
March 16-19, 2014

The early registration deadline is February 2, 2014.

Book your hotel room at www.starwoodmeeting.com/Star

For more information, visit www.hfes.org/Web/HFES

CALL FOR PROPOSALS & PAPERS
IEEE CogSIMA 2014
San Antonio, Texas, USA, March 3-6 2014

The 4th IEEE CogSIMA 2014 Conference provides a venue for presenting scientific results of multi-disciplinary studies specific to complex heterogeneous dynamical systems that include humans, physical systems, computer agents and networks whose behaviors depend on situations. CogSIMA encourages paper submissions from academic, industry, and military researchers in the fields of Computer Science, Human Factors, Cognitive Science, and Experimental Psychology. Submissions may include completed research, work-in-process, theoretical design, and/or prototype/equipment design and development. Work should be related to situation awareness and decision support.

Abstract & Full Paper Due: November 10, 2013
Acceptance Notification: December 15, 2013
Camera Ready Paper: February 1, 2014
We look forward to receiving your submission. For more information, visit our website at www.cogsim2014.org. ※

2014 IIE Annual Conference
Montréal, Canada, May 31 – June 3, 2014

The Institute of Industrial Engineers (IIE) is sponsoring the Human Factors and Ergonomics Track at the 2014 Industrial and Systems Engineering Research Conference (ISERC). The ISERC is the new name for the Industrial Engineering Research Conference (IERC). The ISERC, which is part of the IIE Annual Conference and Expo, is a forum for exchanging knowledge and discoveries in the industrial and systems engineering research community.

As track chairs of the Human Factors and Ergonomics Track, we would like to encourage you to contribute to the conference by submitting an abstract. Authors of accepted abstracts will be invited to present their work in ISERC sessions. Each session will be 75 minutes and have 3 or 4 presenters. Abstracts are welcome in the following areas (in no particular order):

Industrial Ergonomics
Safety
Neuroergonomics
Modeling
Aging
Individualistic Differences
Macroergonomics
Sociotechnical Systems
Communication
Healthcare Human Factors

Transportation
Human Performance Modeling
Work Physiology
Perception and Performance
Human Computer Interaction
Interaction
Virtual Environments
Augmented Cognition
Cognitive Ergonomics
Training

Other Relevant Topics …

We strongly encourage all presenters to submit a full length paper for the conference proceedings. The papers should contain results that are significant and have archival value to the industrial and systems engineering research community. Full papers have a ten-page limit and will undergo a double-blind peer review process. All accepted papers are indexed by ProQuest. IIE is currently working on uploading papers of previous years onto IIE website. Presentations without a paper are acceptable, but will not be indexed in the conference proceedings.

If your abstract or paper is accepted: (a) the presenting author for the paper must register for the conference by March 15, 2014 (presentations/papers without the presenting author being registered for the conference will be withdrawn from the program and the proceedings); (b) the presenting author must attend and present the paper at the conference; and (c) we ask that you be ready to serve as a reviewer for fellow authors and follow review deadlines.

There are also opportunities to organize invited sessions, or panels. In addition to research presentations, the annual conference offers many opportunities for attendees, including the Applied Solutions Conference program, plant tours, networking, and keynote speakers.

More info can be found at the conference website (www.iienet.org/annual), and also please feel free to email us (Ranjana Mehta rmmehta@tamu.edu; Thomas Ferris tferris@tamu.edu; ISERC’14 Human Factors and Ergonomics Track Co-chairs) with any questions. ※

SPECIAL ISSUES OF IEEE TRANSACTIONS ON HUMAN-MACHINE SYSTEMS

For detailed submission information, please refer to “Information for Authors” at www.ieeesmc.org/publications/thms-info-for-authors.pdf

Ambient Assisted Living – Sensors, Methods and Applications

This special issue on Ambient Assisted Living. Ambient Assisted Living (AAL) focuses on the use of information and communication technologies (ICT) to support a person’s activities of daily living (ADL) thus allowing the person to remain independent for a longer period of time. AAL systems range from simple systems such as reminder systems to sophisticated smart environments. A smart home can monitor and assist a person with ADLs by integrating sensors embedded in the environment and processing that can extract information pertaining to the person’s health and well-being. Sensing technology can be embedded in objects, in the environment or worn on the person. Sensor data are analysed to recognise and track activity and to infer the person’s physical and/or cognitive status.

Topics of interest include but not limited to:

- Objects, devices and environments that embody ambient intelligence
- Natural and multimodal interaction styles and user interfaces
- Design and evaluation of interaction in AAL systems
- Human behaviour understanding
- Human activity recognition
• Interaction with the smart home (wearable, gesture recognition, affective computing)
• Interaction with social robots
• Context models and context factors
• Adaptive architectures, symbiotic systems
• User experience and user experience factors (privacy, trust and acceptance)
• Ambient intelligence applications (e.g., assisted living, future shopping)
• Large scale ambient contexts (e.g., intelligent buildings, urban public spaces, smart cities)

Paper submission due: March 1, 2014
Completion of 1st round of reviews: July 1, 2014
Revised manuscript due: September 1, 2014
Final decision notification: October 1, 2014
Final version of the manuscript: December 1, 2014

Papers should be submitted to mc.manuscriptcentral.com/thms with a cover letter including the statement “This manuscript is submitted for the special issue on Human-Centered Internet of Things”.

Guest Editors
Dorothy Monekosso, dorothy.monekosso@brl.ac.uk
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All enquiries about the special issue should be sent to dorothy.monekosso@brl.ac.uk ※

Human-Centered Internet of Things

The Internet of Things (IoT) refers to uniquely identifiable objects and people as well as their virtual representations in an Internet-like structure. After the Web and mobile accessibility, IoT has been hailed as the most potentially disruptive technological revolution of our lifetime, even more promising with smart applications (such as smart cities, smart Grid, smart factories, smart buildings, smart homes, and smart cars). In these systems, people are not only the end users but are integral parts of the systems. It is therefore important to improve human interaction with such IoT systems. Barriers involved in linking humans and technological systems through an Internet of Things raises a number of specific challenges including human behavior recognition, modeling and representation; human interaction with the IoT technologies; and IoT system safety, security and privacy.

The goal of this special issue is to address these challenges and concerns in order to promote human-centered design and development of future IoT systems, and to provide insights into human computer interaction in real IoT contexts. Suggested topics include but are not limited to:
• Theoretical foundations of HCI in IoT systems
• Human-centered system design methodologies for IoT systems
• Human-device interactions/interfaces in IoT systems
• Gesture-based and voice-based control in IoT systems
• Psychological and social impacts of IoT technologies and applications

Manuscript submission: February 15, 2014
Completion of 1st round of reviews: May 15, 2014
Revised manuscript due: July 15, 2014
Final decision notification: August 15, 2014
Final version of manuscript: September 15, 2014

Papers should be submitted to mc.manuscriptcentral.com/thms with a cover letter including the statement “This manuscript is submitted for the special issue on Human-Centered Internet of Things”.

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Systematic Approaches to Human-Machine Interface: Improving Resilience, Robustness, and Stability

Remote mission management, unmanned aircraft systems, NextGen operations in the U.S. and its SESAR counterparts in Europe, and other similarly integrated systems of systems include complex human-machine systems with high levels of autonomy and team dynamics that are difficult to understand and analyze. It is important to develop techniques that facilitate a better characterization of the behaviors and performance of these complex systems, first in the lab, and then in the field. Techniques including formal verification, cognitive modeling, and task analysis are being explored in several disciplines. These efforts strive to quantify resilience, robustness, stability, and other properties of these complex systems. This special issue solicits interdisciplinary works that cross the various communities studying these important and complex human-
machine interactions. The issue aims to explore key research areas that impact the properties of these systems which rely on varied degrees of human and machine interactions.

Topics of interest include but not limited to:
- Model classes, methodologies, and constructs for modeling human-machine activities in a way that is amenable to formal verification
- Model abstractions for systematic analysis
- Managing authority between humans, autonomy, and model-based reasoning
- Design for explicit reasoning models in the human-machine interaction loop
- Model checking human-machine systems
- Ethical considerations in using verified models to allocate responsibility and authority between humans and machines
- Organizational structures for human-machine collaborative work
- Methods for dynamic model evolution in the presence of learning agents
- Modeling and guaranteeing performance in human-robot interaction

EMPLOYMENT OPPORTUNITIES

The following pages are descriptions of recent job openings. Please click on the link for more information, including where to apply. All positions are listed in the order of deadline.

POSTDOCTORAL FELLOWSHIPS

Beckman Institute Postdoctoral Fellowships program
University of Illinois at Urbana-Champaign
Application deadline is December 2, 2013.

The Beckman Institute at the University of Illinois at Urbana-Champaign is now accepting applications for the Beckman Institute Postdoctoral Fellowships program. Beckman Postdoc Fellows should work in an interdisciplinary area of the Beckman Institute, which includes Human-Computer Intelligent Interaction, Human Perception and Performance, Cognitive Science, and more! Postdoc Fellows are appointed for three years, receive about $52k/year stipend, and their own $20K research budget. For more information and application instructions, visit beckman.illinois.edu/research/fellows-and-awards/postdoctoral/app-instructions.

FACULTY OPENINGS

Wilmott Endowed Faculty Chair
Lehigh University
Industrial & Systems Engineering
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Faculty Openings
Texas A&M University
Industrial & Systems Engineering
Review of applications will begin immediately.
Page 10

Tenure Track Assistant Professor
Lehigh University
Industrial & Systems Engineering
Review of applications begins November 1, 2013.
Page 11

Two Tenure Track Positions
University of Oklahoma
School of Industrial & Systems Engineering
Screening of candidates begins November 1, 2013.
Page 12

Listings continued on the next page
Three Tenure Track Positions
Arizona State University
Cognitive Science & Engineering Program
Department of Technological Entrepreneurship & Innovation Management
Application deadline is November 15, 2013.
Page 13

Faculty Opening in Operations Research
University of Buffalo, State University of New York
Department of Industrial & Systems Engineering
Application deadline is November 15, 2013.
Page 15

Tenure Track Positions
University of Southern California
Department of Industrial & Systems Engineering
Application must be received by December 6, 2013.
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Multiple Tenure Track Positions
Drexel University
College of Computing & Informatics
Application must be received by February 28, 2014.
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Cognitia Volume 20, No. 1, Winter 2014
Newsletter of the Cognitive Engineering and Decision Making Technical Group
Cognitia is published by the CEDM-TG of the Human Factors and Ergonomics Society. For membership information, see the HFES website at hfes.org.

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For previous editions of this newsletter, please visit http://tg.hfes.org/cedm/newsletter.htm

Questions? Comments? Suggestions? Submissions?
Please contact the newsletter editor at zarrin@gatech.edu
Industrial and Systems Engineering Department
Lehigh University

Wilmott Endowed Faculty Chair

The department invites nominations and applications for the Wilmott Endowed Faculty Chair position. The Wilmott chair is a senior faculty at the level of Full or Associate Professor. Candidates are expected to have strong methodological backgrounds in ISE-relevant disciplines, including operations research, systems engineering and computational sciences. Candidates with strength in university strategic areas, such as healthcare and energy systems, are especially encouraged to apply. The candidate must demonstrate a strong commitment to undergraduate and graduate education, conduct an active research program with strong external support, and be willing to lead interdisciplinary research opportunities within the college and university.

Established in 1926, the ISE Department currently has 19 full-time faculty members, 170 undergraduate and 210 graduate students, 40 of whom are Ph.D. students. We offer comprehensive research and award-winning education programs at the B.S., M.S., and Ph.D. levels, including the new, innovative Healthcare Systems Engineering Master Program. ISE have recently been a finalist for the INFORMS George D. Smith Prize for innovation in Operations Research / Analytics education. The ISE faculty maintains an outstanding international reputation in a variety of research areas. Active research topics include discrete optimization, nonlinear optimization, interior point methods, conic linear optimization, high-performance computing, energy systems, financial engineering, and a variety of topics in logistics and supply chain analysis.

The Department maintains excellent computational and laboratory facilities, including a parallel computing cluster and other associated computing infrastructure housed in a brand new state-of-the-art facility maintained as part of the Laboratory for Computational Optimization Research. Annual research expenditures exceed $3 million. The Department has extensive interdisciplinary ties with the business school and the college of arts and science through centers, such as the Center for Value Chain Research, and the Analytical Finance program; and through interdisciplinary clusters, such as Smart Grid, Integrated Healthcare Delivery, and Computational Science and Engineering.

To apply for this position, please visit the application web site.

For questions only, please contact Dr. Ted Ralphs at ted-at-lehigh-dot-edu or Dr. Katya Scheinberg at kas410-at-lehigh-dot-edu.
Multiple Faculty Positions in Industrial and Systems Engineering

The Department of Industrial and Systems Engineering at Texas A&M University is seeking exceptional scholars to join the faculty at the Associate and Full Professor levels, including outstanding junior candidates at the Assistant Professor level well posed for promotion to the next level. The department has strong and well-recognized graduate and undergraduate programs and an outstanding faculty with diverse research agendas in the broad sense of systems engineering studies, including manufacturing, healthcare, supply chain, energy, and human factors, creating numerous opportunities for collaboration. Applications are invited in all areas of Industrial and Systems Engineering but preferences will be given to those whose have expertise in Next Generation Manufacturing Systems, Big Data, and Human Factor. A strong candidate should have the potential to make an impact on the future of systems engineering, especially manufacturing systems, healthcare systems, or energy systems. Outstanding candidates will be considered for endowed faculty fellowships or professorships. The department recently made three new hires, two in the manufacturing systems and one in the cognitive/organizational systems. The department plans to continue building critical masses and establish national recognition in these areas.

The department values and supports interdisciplinary research, and successful candidates will have opportunities to collaborate with researchers at the National Center for Therapeutics Manufacturing (http://nctm.tamu.edu/), the Mary Kay O’Connor Process Safety Center (http://process-safety.tamu.edu/), the Energy Institute (http://energyengineering.org/), the George Bush School of Government and Public Service (http://bush.tamu.edu/), and many other research groups across the college and university.

Candidates should possess a Ph.D. degree in industrial and systems engineering, cognitive psychology, or a closely related discipline. In addition, an exemplary record of scholarship, external research support, teaching, and supervision of doctoral students is required for a tenured faculty position. Successful candidates will be expected to lead multi-investigator research programs, teach graduate and undergraduate classes, and contribute to the Department’s service mission.

Applicants should submit curriculum vitae, one-page statements describing teaching and research goals, and a list of three references. Review of applications will begin immediately and will continue until the positions are filled.

For additional information or submission of applications contact:

Dr. César O. Malavé
Professor and Holder of the Sugar and Mike Barnes Department Head Chair
Industrial and Systems Engineering
Texas A&M University
3131 TAMU
College Station, TX 77843-3131
(979) 845-5535
facsearch@iemail.tamu.edu

More information about the department and Texas A&M University can be found at http://ise.tamu.edu.

The members of Texas A&M Engineering are all Affirmative Action/Equal Employment Opportunity Employers. It is the policy of these members in all aspects of operations each persons shall be considered solely on the basis of qualifications, without regard to race, color, sex, religion, national origin, age, disabilities or veteran status.
Industrial and Systems Engineering Department
Lehigh University

Tenure track Assistant Professor

The department invites applications for a tenure track position at the level of Assistant Professor. We welcome applications from individuals with strong backgrounds in any ISE-relevant discipline, including industrial engineering, operations research, systems engineering, and computer science. Expertise in the University’s strategic growth areas including health, globalization, and energy, environment and infrastructure systems are of particular interest. The candidate must hold a Ph.D. by the time of employment in fall 2014. The candidate must demonstrate a strong commitment to undergraduate and graduate education, and the potential to develop and conduct a high impact research program with external support.

Established in 1926, the ISE Department currently has 16 full-time faculty members, about 150 undergraduate and 180 graduate students, 40 of whom are Ph.D. students. Recently the department established an innovative Healthcare Systems Engineering masters program, and was chosen by INFORMS as one of the finalists for the UPS George D. Smith Prize. Annual Department research expenditures exceed $3 million. We offer comprehensive research and education programs at the B.S., M.S., and Ph.D. levels. The ISE faculty maintains an outstanding international reputation in a variety of research areas. The department is undergoing significant growth in various areas of operations research and computing. Current research thrusts include (1) optimization, (2) high-performance computing, (3) manufacturing, and supply-chain management, (4) service systems, and logistics, (5) information systems, and (6) stochastic processes.

To apply for this position, please visit the application web site. All applications must be submitted through AcademicJobsOnline.org.

Review of applications will begin November 1, 2013 and will continue until the position is filled. The application should include a cover letter, a statement of research and teaching interests, a curriculum vita, names and addresses of at least three references, and representative research paper(s). Inquiries may be addressed to Professor Robert H. Storer, Search Committee Chair, rhs2-at-lehigh-dot-edu.

Department representatives will be conducting interviews at the Informs conference in Minneapolis. Please visit us during the Job Fair and submit a resume.
Faculty Positions in Systems Engineering and Analytics
School of Industrial and Systems Engineering
University of Oklahoma, Norman, Oklahoma

The School of Industrial and Systems Engineering at the University of Oklahoma is excited to announce two tenure-track positions in Systems Engineering, with emphases on leveraging big data analytics to discover insightful patterns, inform intelligent decisions, and improve system performance. The School of Industrial and Systems Engineering is seeking two motivated candidates to complement our expanding programs in analytics towards the design of next-generation systems. We are most interested in candidates that bring demonstrated research potential for integrating big data analytics with the areas of human factors and/or digital manufacturing. Relevant research domains include:

- Cognitive engineering and decision making in complex operational environments;
- Human system integration for collaborative intelligence;
- Modeling of human behavior, dynamics, and mobility;
- Cyber-enabled digital design and manufacturing processes;
- Real-time operational intelligence of manufacturing machines, particularly within the aerospace and energy sectors;
- Integrated systems management through data driven and/or model-based approaches to prognostics and systems health throughout the system life-cycle of complex engineered systems.

While primary emphasis for the selection of the candidates will be in these research domains, all areas of systems engineering will be considered for the available position.

Candidates for the positions shall possess an earned doctorate in industrial engineering, systems engineering, or a closely related discipline with a demonstrated potential to conduct scholarship that has impact. The selected candidates must have excellent verbal and written communication skills as they are expected to use multi-modal techniques to teach undergraduate and graduate courses. The successful candidates will be prepared to lead an innovative research program, and to build multi-disciplinary solutions to large-scale systems engineering problems through academic, industry, and government collaborations in basic and applied research. Applicants will be considered at the Assistant Professor level.

Inquiries about this position may be directed by email (preferable) or phone to:

Dr. Shivakumar Raman, Search Committee Chair, Digital Manufacturing
Phone: 405 325 3721
Email: raman@ou.edu

Dr. Randa L. Shehab, Search Committee Chair, Human Factors
Phone: 405-325-2307
Email: rlshehab@ou.edu

Candidates are invited to submit a statement of vision for this opportunity, addressing how they fulfill the qualifications noted herein, a curriculum vita listing academic preparation, relevant work experience, teaching experience, scholarly publications, and a list of three references who will be contacted only upon permission of the candidate. Screening of candidates will begin Nov 1, 2013 and continue until position is filled. Candidates are requested to submit their applications electronically in a single PDF file to:

Chair, ISE Search Committee
School of Industrial and Systems Engineering
202 W. Boyd St, Suite 124, University of Oklahoma, Norman, Oklahoma 73019
Attention: Jean Shingledecker (eshingled@ou.edu)

The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer and encourages diversity in the workplace.
Position Announcement
Cognitive Science and Engineering Program
Department of Technological Entrepreneurship and Innovation Management
College of Technology and Innovation
Arizona State University
Job #10558

The College of Technology and Innovation (CTI) at Arizona State University at the Polytechnic campus invites applicants to fill three tenure-track positions in the area of applied psychology for its Cognitive Science and Engineering program. We seek applicants at the Assistant or Associate Professor level, although exceptional candidates at all levels will be considered.

The successful candidates will be expected to maintain a productive, externally-funded research program, conduct research publishable in top-tier academic journals in the discipline, deliver instruction at the undergraduate, master’s, and doctoral levels, supervise honors, masters, and doctoral students, contribute to graduate (MS and PhD) and undergraduate curriculum development, and participate in professional and university service. The successful candidates will have numerous opportunities to collaborate with colleagues within the department (aviation, graphic information technology, gaming and virtual training technologies, management, healthcare human factors, and learning science) and more broadly within CTI (engineering, software engineering, and others), and will also have access to a rich and growing array of simulation technology (e.g., driving, flight, team task environments, unmanned aerial systems simulators, and air traffic control simulators) located on campus. The appointment will begin in August 2014.

Applicants must have a PhD in cognitive psychology, cognitive science, experimental psychology, social psychology, industrial-organizational psychology, aviation psychology, human-computer interaction, human factors, or related discipline at the time of appointment and a strong record, or strong potential, of publishing in the field. Preference will be given to candidates who can collaborate with others in our department in areas of aviation, graphic information technology, gaming and virtual training technologies, management, consumer psychology, judgment and decision-making, healthcare human factors, educational technology, entrepreneurship and innovation, user-interface, user-experience, and learning science. Desired qualifications include demonstrated experience and success in effective teaching, research and other scholarly and service activities appropriate to the Department of Technological Entrepreneurship and Innovation Management’s mission.

Arizona State University (ASU) is a new model for the American research university, committed to excellence, access and impact. ASU pursues applications of research that contributes to the public good. The university assumes major responsibility for the economic, social and cultural vitality of the communities that surround it. ASU at the Polytechnic Campus enrolls more than 9,000 students on a 600-acre campus in a
beautiful desert arboretum in the growing Gateway region on the southeast edge of the Greater Phoenix metropolitan area. CTI embodies the polytechnic values of engaged learning, applied research, engagement with industry, and innovation and entrepreneurship. CTI is enjoying a period of substantial growth and now enrolls more than 3,400 students majoring in undergraduate and graduate degrees within the areas of Human & Environmental Systems and Engineering & Computing Systems. The programs thrive under the guidance of more than 105 outstanding faculty members with expertise in many of the most important technological challenges that society faces.

Interested candidates must submit:

- detailed cover letter indicating desired rank and area(s) of interest,
- statements of teaching and research limited to one page each,
- reprints/preprints (no more than 3),
- a curriculum vitae,
- three letters of recommendation

Please submit applications by email in a single PDF file to Becky Montez (bmontez@asu.edu). Application deadline is November 15, 2013; if not filled, reviews will occur on the first of the month thereafter until search is closed. For further information, contact Dr. Nancy Cooke, Chair Search Committee, at Nancy.Cooke@asu.edu.

Arizona State University is an equal opportunity/affirmative action employer. Arizona State University requires that an employment history and criminal background check is conducted prior to an employment offer. Women and minorities are encouraged to apply (see ASU’s complete non-discrimination statement). The College of Technology and Innovation actively encourages diversity among its students, faculty, and staff. Equal Employment Opportunity Survey.
Faculty Opening in Operations Research

The Department of Industrial and Systems Engineering at the University at Buffalo, State University of New York, is seeking candidates for a tenure-track Assistant Professor or Associate Professor in the broad area of Operations Research, with a start date of August 2014. Successful candidates will teach and establish a nationally visible research program in one or more of the following areas: Logistics and Supply Chain Management; Big Data Analytics; Information Fusion; or Computational OR. The application areas of particular interest to the department are defense, surface transportation, extreme events, and humanitarian systems. ISE at UB is enjoying an unprecedented period of growth; this hire will complement five recent hires in areas of operations research, manufacturing systems, and human factors. Exceptional candidates at the assistant professor position may be considered for a named professorship.

The university has several successful research enterprises that will help facilitate the professional development of the successful candidate. These include the Center for Multisource Information Fusion (www.infofusion.buffalo.edu), Center for Computational Research (ccr.buffalo.edu), New York State Center for Engineering Design and Industrial Innovation (www.nyscedii.buffalo.edu), and the Institute for Sustainable Transportation and Logistics.

The UB ISE department has a long history of scholarship and education in Industrial and Systems Engineering and interdisciplinary research activities, including an excellent record of PhD student research and placement. The department offers B.S., M.S., Ph.D., and combined degrees with concentrations in operations research, human factors, and production systems, and has an ABET accredited undergraduate IE program. Please see www.ise.buffalo.edu for more information.

Applicants should submit a curriculum vitae, research and teaching statements, and names of three references. For full consideration applications should be received by November 15, 2013. Applicants should hold a PhD in Industrial and Systems Engineering or a closely related field which must be conferred at the time of appointment.

All applications should be submitted to UB Jobs: www.ubjobs.buffalo.edu; link directly via: www.ubjobs.buffalo.edu/applicants/Central?quickFind=56612 or search for posting #1300687.

The University at Buffalo is a premier public university, a member of American Association of Universities, and an affirmative action/equal opportunity employer.

For further information, please contact Dr. Li Lin, Chair, Search Committee, at indlin@buffalo.edu or 716-645-4713.
The University of Southern California, one of the nation’s top research universities, invites applications for tenure-track positions in the Daniel J. Epstein Department of Industrial and Systems Engineering in the Viterbi School of Engineering. Applications for the levels of Assistant and Associate Professor will be considered.

These positions are targeted toward growth in systems modeling, design, and analysis, with an emphasis on areas of current and increasing importance to the ISE research community (e.g., data science, informatics, and analytics in healthcare, production/manufacturing, etc).

We seek energetic individuals who will participate in the university’s research enterprise and engage in classroom teaching at the graduate and undergraduate levels. Successful candidates will establish a strong, externally funded, research program of national prominence while contributing to the core teaching mission of the ISE department. An earned doctorate in a field closely related to Industrial and Systems Engineering is required.

Positions are available starting August 16, 2014. Candidates should apply at ise.usc.edu. Applications should include: a cover letter; curriculum vitae detailing educational background, research accomplishments and work experience; a one-page statement of current and future research; and names of at least four professional references. In order to receive full consideration, all materials should be received by December 6, 2013, but earlier application is encouraged. Interested individuals may contact Professor Julie Higle, Chair of the Daniel J. Epstein Department of Industrial and Systems Engineering (julie.higle@usc.edu).

The USC Viterbi School of Engineering is among the top engineering schools in the world. More than a third of its 177 tenured/tenure-track faculty members are fellows in their respective professional societies and 35 affiliated faculty have been elected to the National Academy of Engineering. The School is home to over 45 research centers and institutes, including the Information Sciences Institute (ISI), two National Science Foundation Engineering Research Centers, the Department of Homeland Security CREATE Center, and an Energy Frontiers Research Center (EFRC) supported by the Department of Energy. It is affiliated with the Alfred E. Mann Institute for Biomedical Engineering, the Institute for Creative Technologies, and the USC Stevens Center for Innovation. USC Viterbi faculty conduct research in leading-edge technologies with annual research expenditures exceeding $180 million.

The University of Southern California strongly values diversity and is committed to equal opportunity in employment. Women, men, and members of all racial and ethnic groups are encouraged to apply.
Drexel University College of Computing & Informatics Faculty Positions

Drexel University’s new College of Computing & Informatics (cci.drexel.edu) invites applications for multiple tenure-track faculty positions at all levels. The College offers graduate and undergraduate degrees in computer science, cybersecurity, informatics, information systems, information technology, library and information science, and software engineering. We seek candidates who can contribute to university-wide objectives in Energy, Health Sciences and Systems, Sustainability, Entrepreneurship, and Information & Society and align with strategic plans for the College and University (http://www.drexel.edu/strategicPlan/).

Areas of interest this year include

1. Security & Privacy (e.g., cryptography, cyber-policy and ethics, systems);
2. Software & Systems Engineering (e.g., cloud and mobile computing, software quality, software process, architecture, and system administration);
3. Intelligent Systems (e.g., computer vision, machine learning, gaming, GIS);
4. Human-Centered Computing (e.g., HCI, socio-technical studies, eLearning, decision support, neuro/cognitive modeling);
5. Informatics and Data Science (e.g., eScience, databases, data mining, analytics and visualization);
6. Library and Information Science (e.g., archives, library systems, digital libraries, information policy, information behavior, and retrieval).
7. Exceptional candidates in other areas will be considered.

Drexel is a private university committed to research with real-world applications. The university has over 25,000 students in 14 colleges and schools and offers about 200 degree programs. The College of Computing and Informatics has about 75 faculty and 2,300 students. Drexel has one of the largest and best known cooperative education programs with over 1,200 co-op employers. Drexel is located on Philadelphia’s “Avenue of Technology” in the University City District and at the hub of the academic, cultural, and historical resources of the nation’s sixth largest metropolitan region.

Review of applications begins immediately. To assure consideration, materials from applicants should be received by February 28, 2014. Successful applicants must demonstrate potential for research and teaching excellence in the environment of a major research university.

To be considered, please send an email to: search-14@cci.drexel.edu with a cover letter, CV, and brief statements describing your research program and teaching interests. Letters of reference will be requested from the candidates who are invited for a campus interview. Electronic submissions in PDF format are required.

Drexel University is an Equal Opportunity/Affirmative Action Employer. The College of Computing & Informatics is especially interested in qualified candidates who can contribute to the diversity and excellence of the academic community. Background investigations are required for all new hires as a condition of employment, after the job offer is made. Employment will be contingent upon the University's acceptance of the results of the background investigation.