

New Faculty Orientation August 2016 Welcome and Overview

Timothy M. Pinkston
Vice Dean for Faculty Affairs
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Assistant Professors

- Alejandra Uranga, AME*
- Eun Ji Chung, BME***
- Bora Gencturk, CEE***
- Daniel McCurry, CEE****
- Paulo Branicio, CHEMS****
- Ilias Diakonikolas, CS*
- Joseph Lim, CS****
- Naveed Muhammed, CS**
- Chao Wang, CS***
- Dina El-Damak, EE-EP***
- Pierluigi Nuzzo, EE-S***
- Insoon Yang, EE-S***
- Meisam Razaviyayn, ISE***
- Sze-chuan Suen, ISE***
- Birendra Jha, PTE*

Professors

- Satyandra K. Gupta, AME*
- Mihailo Jovanovic, EE-S****

Lecturers

- Andrew Goodney, CS***
- Shalini Gupta, ISE***
- Dung Nguyen, ITP***

Senior Lecturer

Arpi Mardirossian, ITP***

Professors of Engineering Practice

- Robert Young, CHEMS*
- Victor Adamchik, CS***
- Neil Siegel, ISE*

Research Assistant Professors

- Timotei Centea, AME**
- Ari Sharipo, CS/ICT**
- Ning Wang, CS/ICT**
- Jonathan May, CS/ISI**
- Emilio Ferrara, CS/ISI**
- Rafael Ferreira da Silva, CS/ISI**



New and Recent T/TT Faculty Hires



Assistant Professors

- Alejandra Uranga, AME*
- Eun Ji Chung, BME***
- Bora Gencturk, CEE***
- Daniel McCurry, CEE****
- Paulo Branicio, CHEMS****
- Ilias Diakonikolas, CS*
- Joseph Lim, CS****
- Naveed Muhammed, CS**
- Chao Wang, CS***
- Dina El-Damak, EE-EP***
- Pierluigi Nuzzo, EE-S***
- Insoon Yang, EE-S***
- Meisam Razaviyayn, ISE***
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- Birendra Jha, PTE*

Professors

- Satyandra K. Gupta, AME*
- Mihailo Jovanovic, EE-S****





































New and Recent Research and Teaching Faculty Hires



Lecturers

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- Shalini Gupta, ISE***
- Dung Nguyen, ITP***

Senior Lecturer

Arpi Mardirossian, ITP***

Professors of Engineering Practice

- Robert Young, CHEMS*
- Victor Adamchik, CS***
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- Rafael Ferreira da Silva, CS/ISI**



























USC at a Glance*



USC Academic Units

 USC Dana and David Dornsife College of Letters, Arts and Sciences; 21 schools and units

USC Faculty (5,811 total)

- Approximately 3,956 full-time faculty; 1,472 T/TT faculty; 4,265 Research, Teaching,
 Practice, and Clinical faculty
- Over 150 elected fellows of prestigious societies (AAAS, AAAL, APS, ALI...)
- Over 60 affiliated faculty in National Academies (NAS, NAE, IOM)
- 10 National Medal award winners, 5 Nobel Laureates

USC Students (43,000 total)

- Approximately 19,000 undergrads; 24,000 grad & professional students
- Degrees awarded June 2015: 5,385 Bachelor's; 9,248 advanced
- More than 377,000 living alumni

Annual Research Expenditures (FY'14-'15) and Endowment (June'15)

Approximately \$691 million in sponsored research; \$4.7 billion endowment



Viterbi School at a Glance*



Viterbi Academic Departments

- AME, AstE, BmE, CEE (Astani), ChEMS (Mork), CS, EE(Hsieh), ISE (Epstein)
- Other academic programs (some non-degree granting): EWP, ITP

Viterbi Faculty

- Approximately 311 full-time faculty: ~185 T/TT; ~126 Research and Teaching
- Over 60 endowed chairs and professorships
- Over 80 elected fellows of prestigious societies (AAAI, ASME, ACM,IEEE,...)
- Over 70 NSF Career, Presidential Young Investigator, PECASE Awardees
- 19 full-time faculty who are National Academy members (33 affiliated fac.)

Viterbi Students

- Approximately 7,800 total: ~2,600 undergrad; ~5,200 grad students
- Over 60, 000 alumni
- Ranked Top 12 Graduate Engineering School in U.S. News & World Report

Viterbi Annual Research Expenditures (~ 1/3rd of USC's)

Typically over ~\$185 million; more than 46 Research Centers and Institutes



Viterbi Academic Program



Academic Programs

- 15 BS programs
- Approximately 17 active minors
 - Over 55 Master's programs
 - Over 41 Master's programs and 4 graduate certificates on-line via DEN@Viterbi
- 13 Doctoral programs

Education and Outside-the-Curriculum Efforts

- Division of Engineering Education
- KIUEL (Klein Institute for Undergraduate Engineering Life)
- VAST (Viterbi Adopt-a-School, Adopt-a-Teacher) K-12 STEM Outreach
- Maseeh Entrepreneurship Prize Competition (MEPC)
- USC Viterbi Student Innovation Institute (VSI2)



Useful USC Resources



Policies and Faculty Portals

- Policies, Faculty Handbook, UCAPT Manual, strategic vision, & core doc's http://policy.usc.edu
- Faculty resources, governance, support, guides, calendars, news, events http://faculty.usc.edu
- Essential guides for faculty (all, new, assistant, NTT, chairs, mentors) http://faculty.usc.edu

Center for Work and Family Life (CWFL)

http://www.usc.edu/programs/cwfl

Center for Excellence in Research (CER)

Proposal writing workshops, proposal review, funding opportunities, ...
 http://www.usc.edu/research/about/vp/cer

Center for Excellence in Teaching (CET)

 Workshops, seminars, programs, and resources for teaching innovation http://cet.usc.edu/resources/teaching_learning/index.html



Useful Viterbi Resources



Viterbi Research Portal

 Funding opportunities, research centers/labs, other info for faculty http://viterbi.usc.edu/research/info

Viterbi Faculty Portal

 School policies, academic integrity, useful links, and other resources http://viterbi.usc.edu/academics/faculty_resources/

Viterbi Mentoring Program

- Mentorship of junior faculty
- WiSE Program
- Mentor-mentee and peer-mentoring luncheons sponsored by School
- Annual group mentoring sessions (Vice Dean for Faculty Affairs)
- NSF Career proposal internal review (Vice Dean for Research)
- Understand mentoring roles, responsibilities, benefits and expectations...identify your needs and set attainable goals http://viterbi.usc.edu/academics/faculty_resources/mentoring/



Graduate Recruitment



USC and Viterbi Ph.D. Fellowships and Awards

- Provost, Annenberg, Viterbi, Mork, Mann, Hsieh, Chevron Fellowships
- Viterbi Supplemental, Merit Top-off, WiSE Top-off, GEM Top-off Awards
- Early Ph.D. Fellowship Offers http://viterbi.usc.edu/students/phd/fellowships-and-other-support/usc-fellowships.htm

On-Campus Recruitment Events

- Master's Student Preview Day http://gapp.usc.edu/MSPreview
- REACH (<u>Recruitment of Engineering Achievers</u>) PhD Preview <u>http://gapp.usc.edu/REACH</u>
- Conversion Visitation Days each Spring (coordinated by departments)



Agenda



8:45am-9:00am	Refreshments	
9:00am-9:10am	Opening and Introductions	Vice Dean Timothy Pinkston
9:10am-9:20am	Welcoming Remarks	Dean Yannis Yortsos
9:20am-10:30am	School Administration	Vice Dean Linda Rock,
		Sr. Assoc. Deans Louise Yates and Binh Tran
10:30am-10:45am	Break	
10:45am-11:00am	Academic Programs	Vice Dean Jim Moore
11:00am-11:15am	Global Initiatives	Vice Dean Raghu Raghavendra
11:15am-11:35am	Appointments, Promotions,	Paul Ronney, Former APT Chair
	Tenure	
11:35am-11:55am	Faculty Affairs	Vice Dean Timothy Pinkston
11:55am-12:00pm	Summary Remarks	Executive Vice Dean John O'Brien
12:00pm-1:15pm	Lunch (various speakers)	Exec. Director of Comm & Marketing Michael Chung, Faculty Awards Branka Cvejic, University Librarian Najwa Hanel, Professor of Engineering Education Practice Gisele Ragusa

Agenda



1:15pm-1:30pm	USC's High-Performance	Erin Snaw,
	Computing &	ACI Research & Education Facilitato

Communications (HPCC)

1:30pm-2:30pm Research at USC Mahta Moghaddam,

Interim Vice Dean for Research

Nichole Phillips,

Director of Research Administration

2:30pm-3:30pm Federal Funding Update; Steve O. Moldin,

Open Q&A Executive Director, Research Advancement

Mahta Moghaddam,

Interim Vice Dean for Research

3:30pm-4pm Break

4:00pm-5:00pm Welcome Reception Viterbi Faculty



Assistant Professors

Alejandra Uranga, AME*



Alejandra Uranga completed her Ph.D. in the Department of Aeronautics and Astronautics at Massachusetts Institute of Technology (MIT) in 2010, with a thesis focused on the use of high-order numerical methods for the accurate simulation of transition to turbulence in flows at low Reynolds numbers, as part of a large project focusing on biologically inspired flapping flight. She joined the Department of Aerospace and Mechanical Engineering at USC as a new faculty member in January of 2016. Her research interests are in novel aircraft design and integrated propulsion systems, and in computational fluid mechanics, in particular the understanding and modeling of transition to turbulence.

Eun Ji Chung, BME ***



Eun Ji Chung will be joining the Department of Biomedical Engineering as an assistant professor. She received her B.A. in Molecular Biology at Scripps College (Claremont, CA) in 2006 and her Ph.D. in Biomedical Engineering from Northwestern University (Evanston, IL) in 2011. Upon receiving the IBNAM-Baxter Early Career Award, she began her postdoctoral training in the Department of Materials Science and Engineering at Northwestern University. Eun Ji continued as a postdoctoral fellow at the Institute for Molecular Engineering at the University of Chicago in 2012 and is a recipient of the American Heart Association Postdoctoral Fellowship, Chicago Biomedical Consortium Postdoctoral Research Grant, and the K99/R00 Pathway to Independence Award from NHLBI. Her overall research interests and goals seek to develop self-assembling nanoparticles and bioinspired biomaterials for theranostic applications and regenerative medicine.





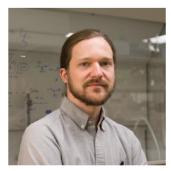
Assistant Professors

Bora Gencturk, CEE***



Bora Gencturk is an Assistant Professor at the Sonny Astani Department of Civil and Environmental Engineering. Dr. Gencturk obtained his Ph.D. degree from the University of Illinois at Urbana-Champaign in 2011. Before joining USC in fall of 2016, he was an assistant professor in the Civil and Environmental Engineering Department at the University of Houston for five years. Dr. Gencturk's technical interests are in the broad fields of extreme event resiliency and sustainability of civil infrastructure. In addition to several other grants and awards, he has received both young investigator awards given by the National Science Foundation (NSF): Faculty Early Career Development (CAREER) and Broadening Participation Research Initiation Grant in Engineering (BRIGE).

Daniel McCurry, CEE ****



Daniel McCurry will join the Sonny Astani Department of Civil and Environmental Engineering as an assistant professor in January 2017. He completed his Ph.D. in Civil and Environmental Engineering at Stanford University in 2016, supported by an NSF Graduate Research Fellowship. Dr. McCurry received an M.S. in Environmental Engineering from Yale University and a B.S. in Civil Engineering from the University of Cincinnati, and worked as a research assistant at the USEPA Office of Research and Development. His research focuses on protecting public health by improving the long-term safety of engineered water sources. He applies the tools of environmental organic chemistry to minimize formation of carcinogenic disinfection byproducts during chemical and ultraviolet disinfection of wastewater and drinking water.





Assistant Professors

Paulo Branicio, CHEMS****



Paulo Branicio will be joining the Mork Family Department in Chemical Engineering and Materials Science as an assistant professor in January 2017. He received his Ph.D. degree in Materials Physics in 2001 from the Federal University of São Carlos - Brazil. His research interests are on large-scale atomistic modeling of materials, metals and ceramics under extreme conditions, dynamic plasticity, mechanical properties of nanostructured materials, phase change materials, and metallic glasses and nanoglasses.

Ilias Diakonikolas, CS *



Ilias Diakonikolas holds a diploma in Electrical and Computer Engineering from the National Technical University of Athens, and a Ph.D. in Computer Science from Columbia University (2010) where he was advised by Mihalis Yannakakis. He received a best thesis award for his doctoral dissertation and an honorable mention in the 2009 George Nicholson competition from the INFORMS society. He spent two years (2010-2012) as the Simons postdoctoral fellow in Theoretical Computer Science at the University of California, Berkeley. In spring of 2016, Ilias joined the Department of Computer Science at USC as an assistant professor. Ilias' main research interests lie on the algorithmic foundations of massive data sets, with an emphasis on algorithms for learning and statistics. He also has strong interests in optimization and game theory.





Assistant Professors

Joseph Lim, CS****



Joseph Lim will be joining USC in spring of 2017 as an assistant professor in the Department of Computer Science. Dr. Lim is currently a postdoctoral scholar at Stanford University, researching in the Stanford Artificial Intelligence Laboratory led by Professor Fei-Fei Li. He received his B.A. in Computer Science at the University of California – Berkeley, followed by his Ph.D. in Electrical Engineering and Computer Science at Massachusetts Institute of Technology. His interests include: deep learning, multi-domain data and structure learning, with a research focus on computer vision and machine learning.

Naveed Muhammed, CS **



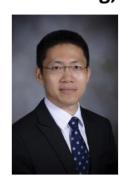
Naveed Muhammed joined USC as an assistant professor in the Department of Computer Science in the summer of 2016. He received his Ph.D. in Computer Science from the University of Illinois at Urbana-Champaign and his B.S. in Electrical Engineering at the University of Engineering and Technology, Peshawar, Pakistan. Among Dr. Muhammed's awards are the 2015 Google Ph.D. fellowship in Security, the Sohaib and Sara Abbasi fellowship (2011-2016), the Ross J. Martin Outstanding Research Achievement Award from the UIUC College of Engineering, and the C.W. Gear Outstanding Graduate Student Award from the UIUC Department of Computer Science. His research interests focus on applied cryptography and systems security.





Assistant Professors

Chao Wang, CS***



Chao Wang received his Ph.D. degree from University of Colorado at Boulder in 2004. Prior to joining USC in fall 2016, he was an Assistant Professor of Electrical and Computer Engineering at Virginia Tech. His research focuses on software engineering and formal methods in which he develops methods and analysis tools for improving the safety and security of software. Of particular interest are the emerging software applications in cyber physical systems (CPS) and the Internet of Things (IoT). He published a book and more than seventy research papers, many of which appeared in top venues of his field. He has received several rewards, including the ONR Young Investigator Award in 2013, the NSF CAREER Award in 2012, and ACM SIGSOFT Distinguished Paper Award in 2010.

Dina El-Damak, EE-EP***



Dina El-Damak is joining the Ming Hsieh Department of Electrical Engineering as a WiSE Gabilan Assistant Professor. She received B.Sc. and M.Sc. degrees in Electronics and Electrical Communication Engineering from Ain Shams University, Cairo, Egypt and S.M. and Ph.D. degrees in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (MIT). After receiving her doctoral degree, she spent one year as a postdoctoral associate at the MIT's Microsystems Technology Laboratories. Her research interests include energy harvesting, power management circuits, ultra-low power biomedical devices and circuit design in emerging technologies. She has published in conferences and journals in the field including ISSCC, VLSI Circuits and Technology, IEDM, JSSC. Dr. El-Damak was featured as one of the women rising stars in EECS in 2014 at UC Berkeley and was the recipient of Texas Instruments Graduate Woman's Fellowship for Leadership in Microelectronics for the academic years 2012-2013 and 2013-2014.





Assistant Professors

Pierluigi Nuzzo, EE-S***



Pierluigi Nuzzo completed his Ph.D. in Electrical Engineering and Computer Science from the University of California at Berkeley in 2015. After receiving his degree, he spent a year as a Postdoctoral Scholar at the Department of Electrical Engineering and Computer Sciences (EECS). Dr. Nuzzo's research interests include: methodologies and tools for the design of cyber-physical systems and mixed-signal systems; contracts, interfaces, and compositional methods for embedded system design and requirement engineering; the application of automated formal methods and optimization theory to problems in embedded and cyber-physical systems and electronic design automation. Dr. Nuzzo was a recipient of the Best Submission in the Design Automation Conference (DAC) and International Solid-State Circuits Conference (ISSCC) Design Competition in 2006 and the Best Paper Award from the International Conference on Cyber-Physical Systems (ICCPS) in 2016.

Insoon Yang, EE-ES***



Insoon Yang will be an Assistant Professor at the Ming Hsieh Department of Electrical Engineering starting fall of 2016. He completed his Ph.D. in EECS from UC Berkeley in 2015 and received an M.A. in Mathematics and an MS in EECS from UC Berkeley in 2013 and 2012, respectively; B.S. degrees in Mathematics and in Mechanical Engineering (summa cum laude) from Seoul National University in 2009. His research interests are in stochastic control, optimization in systems and control, energy and power systems and energy policy. In particular, he works on control methods, risk management solutions and incentive mechanisms for the Internet of Things (e.g., smart home) and cyber-physical systems (e.g., power grids) under limited information. He received the 2015 Eli Jury Award for outstanding achievement in the area of systems, communication and control.





Assistant Professors

Meisam Razaviyayn, ISE***



Meisam Razaviyayn is an Assistant Professor at the Daniel J. Epstein Department of Industrial and Systems Engineering. Prior to joining USC, he was a postdoctoral research fellow in the Electrical Engineering Department at Stanford University. He obtained his Ph.D. degree in Electrical Engineering with a minor in Computer Science from the University of Minnesota in 2014. He was the recipient of the Signal Processing Society Young Author Best Paper Award in 2015 and the University of Minnesota Doctoral Dissertation Fellowship in 2014. He was among the three finalists of the Best Paper Prize for Young Researcher in Continuous Optimization in ICCOPT 2013, and the finalist for the best student paper award in SPAWC 2010. His research interests include the design and study of data analysis algorithms and tools which can efficiently scale to modern big data problems. He is particularly interested in data-driven problems that arise in bioinformatics and computational biology.

Sze-chuan Suen, ISE***



Sze-chuan Suen received her Ph.D. in the Department of Management Science and Engineering from Stanford University in 2016. Dr. Suen will be joining Daniel J. Epstein Department of Industrial and Systems Engineering in fall of 2016. Her research interests include using applied mathematical models to identify epidemiological trends and evaluate the cost-effectiveness of health policies to support informed decision-making. Her research draws from techniques in cost-effectiveness analysis, simulation, dynamic systems modeling, and decision analysis. She has been awarded two Lusted Awards for outstanding research from the Society for Medical Decision Making (SMDM) for her work on modeling tuberculosis in India to improve disease control policy.





Assistant Professors

Birendra Jha, PTE*



Birendra Jha joined the Mork Family Department of Chemical Engineering and Materials Science as an assistant professor in spring of 2016. He received his Ph.D. from the Massachusetts Institute of Technology (MIT) in January, 2014. In 2014, he received the Best Doctoral Thesis Award from the Department of Civil and Environmental Engineering at MIT. His research interests include coupled processes of flow, transport, and mechanical deformation in geologic porous media.



Professors

Satyandra K. Gupta, AME*



Dr. Satyandra K. Gupta joined the Department of Aerospace and Mechanical Engineering in spring of 2016. He received a Master of Technology (M. Tech.) in Production Engineering from the Indian Institute of Technology, Delhi in 1989 and a Ph.D. in Mechanical Engineering from the University of Maryland at College Park in 1994. Prior to joining USC, he was a professor in the Department of Mechanical Engineering and the Institute for Systems Research at the University of Maryland. He was the founding director of the Maryland Robotics Center and the Advanced Manufacturing Laboratory. Dr. Gupta's interest is in the area decision making to facilitate automation. Dr. Gupta has received several honors and awards for his research contributions, including Excellence in Research Award from ASME Computers and Information in Engineering Division in 2013, and 2012 Most Cited Paper Award from *Computer Aided Design Journal*.

Mihailo Jovanovic, EE-S****



Mihailo Jovanovic will be joining USC as a professor in spring of 2017. He received the Ph.D. degree from the University of California at Santa Barbara in 2004. He is a professor of Electrical and Computer Engineering at the University of Minnesota and has held visiting positions with Stanford University and the Institute for Mathematics and its Applications. His current research focuses on design of controller architectures, dynamics and control of fluid flows, and fundamental limitations in the control of large networks of dynamical systems. He is an Associate Editor of the SIAM Journal on Control and Optimization. Prof. Jovanovic received a CAREER Award from the National Science Foundation in 2007 and the George S. Axelby Outstanding Paper Award from the IEEE Control Systems Society in 2013.





Lecturers

Andrew Goodney, CS***



Andrew Goodney received his Ph.D. in computer science at USC in the fall of 2014. Working with Young Cho at USC/ISI, he studied sensor networks in the underwater environment. In total he holds three degrees from USC, having also earned a BS and MS in Electrical Engineering. His research interests focus on the networking aspects of computer science problems, from sensor networks and the Internet of Things, to distributed computing and databases. He is also interested in studying and improving computer science education. After finishing his Ph.D., he taught at Harvey Mudd College, notably as the first professor to teach across both the computer science and engineering departments. This was followed by a semester at Claremont-McKenna college before returning to USC in 2016.

Shalini Gupta, ISE***



Dr. Shalini Gupta will join USC this August, 2016 as a Lecturer. She recently received her Ph.D. degree from University of Texas at Arlington. During her Ph.D., she worked as an enhanced Graduate Teaching Assistant. Her research interests include Supply Chain Management, Six Sigma and Lean Processes, Logistics Management, Production and Inventory Control Management, Facilities Management, Warehouse Management, RFID and Auto-ID Technologies. Dr. Shalini Gupta was a recipient of STEM Fellowship and Carrizo Oil and Gas Fellowship.





Lecturers

Dung Nguyen, ITP***



Dung Nguyen will join USC full time this August, 2016. In May 2014, Dung received his B.S. (Magna Cum Laude) from University of Southern California in Computer Engineering and Computer Science. Dung was immediately hired as a part-time lecturer for the Information Technology Program (ITP) at Viterbi School of Engineering. Dung has taught five courses during the 2015-1026 academic year. He has updated curriculum of three different courses to the latest industry and technology trends. Dung was a recipient of Computer Engineering/Computer Science Outstanding Student Award at the 2014 USC Viterbi Undergraduate Awards.

Senior Lecturer

Arpi Mardirossian will join USC full time this fall 2016.





Professor of Engineering Practice

Robert Young, CHEMS*



Dr. Robert Young received his M.Sc. and Ph.D. in Chemical Engineering from University of California, Santa Barbara in 1985 and 1988, respectively. Prior to joining USC, he was an Associate Professor of Engineering Practice at University of California, Los Angeles. His academic interests include process and plant design and operation, process safety and sustainability, process control, automation, and optimization, computer-aided design and operation, and data analysis. Dr. Robert Young has won three Exxon Mobil Refinery Outstanding Contribution to Excellence Awards and has served as Director for the AIChE Computing and Systems Technology Board from 2006 to 2008. He holds a patent and coninvented Raman Analysis System for Olefin Polymerization Control.

Victor Adamchik, CS***



Victor Adamchik will be joining USC in the fall of 2016, as a professor of engineering practice in the Department of Computer Science. From 2000 to 2016, Dr. Adamchik taught at Carnegie Mellon University as an associate teaching professor in Computer Science, while also working at Wolfram Research this past year. His main area of interest is applied computational mathematics, computer algebra, experimental mathematics, and pen-based computing.



Professor of Engineering Practice

Neil Siegel, ISE*

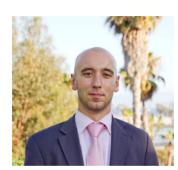


Neil Siegel joins the USC faculty after a long career in the aerospace industry. He is currently vice-president and chief technology officer of Northrop Grumman's Information Systems sector. He leads the sector's technology activities, provides oversight of the sector's research portfolio, and oversees the development of solutions for customers' most complex and most important problems. Prior to this current role, Dr. Siegel was the vice-president and chief engineer of the company's Mission Systems sector. In this position, he oversaw the sector's 12,000-plus scientists and engineers, directed engineering process improvements, and led activities intended to further the development of the company's top technical talent. Other accomplishments include vice-president and general manager of the Tactical Systems division, roles as a program manager, and many others. Dr. Siegel has a doctorate in Systems Engineering from the University of Southern California. His advisor at USC was noted computer scientist & systems engineer Barry Boehm. He holds more than 20 issued patents.



Research Assistant Professor

Timotei Centea, AME**



Timotei Centea is a research assistant professor in the Department of Aerospace and Mechanical Engineering, and a faculty member affiliated with the M.C. Gill Composites Center. He joined the University of Southern California as a postdoctoral scholar in 2013, after earning Ph.D. (2013) and Honours Bachelor's (2008) degrees in Mechanical Engineering from McGill University in Montreal, Canada. His research interests and expertise relate to fundamental and applied aspects of the manufacturing and performance of composite materials and structures. Professor Centea's work has been supported by personal and research funding from government, institutional and industry sources, including a recent four-year contract from NASA. His work has received several awards, including the "Best Paper" at the 26th Annual Conference of the American Society for Composites (2011).

Ari Sharipo, CS/ICT**



Ari Shapiro is a research assistant professor at the University of Southern California in the Viterbi School of Engineering and heads the Character Animation and Simulation research group at the USC Institute for Creative Technologies. His research interests include human animation, human appearance and behavior modeling, 3D reconstruction, computer graphics, physical simulation, as well as control and interaction methods for use with digital characters. He obtained his Ph.D. and M.S. in Computer Science from the University of California, Los Angeles in 2007 and 2002, and his B.A. in Computer Science from the University of California, Santa Cruz in 1999. In the past, he worked for many years in R & D in the visual effects and video game industries for companies such as Industrial Light and Magic, Rhythm & Hues Studios and LucasArts.





Research Assistant Professor

Ning Wang, CS/ICT**



Ning Wang conducts research in the area of artificial intelligence, human-computer interaction and intelligent tutoring systems. Before joining USC, she was a research assistant professor in the Computer Science department of the School of Computing, Informatics, and Decision Systems Engineering at Arizona State University. She received her B.S. in Computer Science and Technology from Hunan University, and later joined the Department of Computer Science and Software Engineering at Auburn University as a researcher and a master's student majoring in human-computer interaction. She completed her Ph.D. thesis on computational social intelligence in pedagogical agents at the Center for Advanced Research in Technology for Education of the Information Sciences Institute at USC in 2008. Her research interests include computational social intelligence, pedagogical agents, intelligent tutoring systems, explainable AI, and persuasive technologies.

Jonathan May, CS/ISI**



Jonathan May received his Ph.D. in Computer Science from USC in 2010. Prior to re-joining USC and the Information Sciences Institute in 2014, he was a research scientist at SDL Language Weaver. Jon's research areas include natural language processing, specifically machine translation and semantic parsing, and formal language theory.





Research Assistant Professor

Emilio Ferrara, CS/ISI**



Dr. Emilio Ferrara holds a Ph.D. in Mathematics and Computer Science from the University of Messina, Italy (03/2012), and has published over 70 articles on machine learning, network science, and social media, appeared in top venues including Proceeding of the National Academy of Sciences, Communications of the ACM, Physical Review Letters, and several ACM and IEEE transactions and top conferences. He has held various research positions in institutions in Italy, Austria, and UK (2009-2012). Before joining USC, he was a Research Assistant Professor in the School of Informatics and Computing of Indiana University (2012-2015). Ferrara's research interests include designing machine-learning systems to model and predict individual behavior in techno-social systems, characterize information diffusion and information campaigns, and predict crime and abuse in such environments. He was named IBM Watson Big Data VIP Influencer in 2015 and received the DARPA Young Faculty Award 2016. His research is supported by DARPA, IARPA, and Office of Naval Research.

Rafael Ferreira da Silva, CS/ISI**



Rafael Ferrerira da Silva is a research assistant professor in the Department of Computer Science at University of Southern California, and a Computer Scientist in the Science Automation Technologies group at the USC Information Sciences Institute. His research focuses on the efficient execution of scientific workflows on heterogeneous distributed systems (e.g., clouds, grids, and supercomputers), computational reproducibility, and Data Science—workflow performance analysis, user behavior in HPC/HTC, and citation analysis (for publications). Dr. Ferrerira da Silva received his Ph.D. in Computer Science from INSA-Lyon, France, in 2013.

