
FACULTY RESEARCH PROFILES

2018-2019

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
AT
UNIVERSITY OF CENTRAL FLORIDA



FACULTY RESEARCH PROFILES ELECTRICAL & COMPUTER ENGINEERING

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INTRODUCTIONS TO ECE RESEARCH

Welcome to Electrical and Computer Engineering (ECE) at the University of Central Florida. We have talented students, dedicated faculty, state-of-the-art facilities, and quality educational programs. Through delivering research-based education to our students and facilitating technology transfers, ECE faculty continue their research endeavors that generate new knowledge and support technology advances as well as economic growth.

ECE is home to the FEEDER Center, one of national-network centers funded by the US Department of Energy under the GEARED program. Also affiliated with ECE is the MIST Center, an NSF I/UCRC program. ECE research is categorized into the following four focus groups, each of which consists of several areas:

- Computer Systems and VLSI
 - Data-intensive High Performance Computing, Massive Storage and File System, I/O Architecture
 - Computer Architecture and Evolvable Hardware
 - Secure, Trusted, and Reliable Processor and ASIC Design; Cyber Security and Cryptography
- Cyber-Physical Systems (Communication, Controls, Signal Processing, and Energy Systems)
 - Networked Systems, Cooperative Control, Optimization and Games
 - Autonomous Robotic Vehicles, Medical and Assistive Robotics
 - Smart Grids, Distributed Generation and Optimization, Protection and Control
 - Biomedical Devices and Control
 - Digital Signal Processing, Detection and Estimation
 - Communication Theory, Cognitive Radios and Networks, Wireless Communication and Sensor Networks
 - Machine Learning, Artificial Neural Networks, Distributed Decision
- Micro- and Nano-Systems
 - Microwave Sensors, Antennas, Phased Arrays and Integrated RF
 - Micro- and Nano- Electronics, MEMS devices, Device Modeling, Acoustic Wave Devices
 - Power electronics, Power Semiconductor devices and ICs
 - Optoelectronic Materials, Thin Films Micromachining
- Electromagnetics
 - Microwave Sensors, Antennas, Phased Arrays and Integrated RF
 - Remote Sensing, Satellite Communications

In this booklet, research profiles of individual ECE faculty are included. Separately, annual reports detailing research accomplishments are available upon request.

Thank you for your interests in and support of ECE students, faculty and their research. You are cordially invited to visit us at your convenience. For more information, please visit our web site at www.ece.ucf.edu or contact the ECE office at (407) 823-5942.

Zhihua Qu

CONTACT INFORMATION
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

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407-823-2610, Parveen.Wahid@ucf.edu

Kalpathy Sundaram, Professor & Graduate Coordinator of ECE, 407-823-5326, sundaram@ucf.edu

TENURE/TENURE-TRACK FACULTY AND RESEARCH FACULTY

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ELECTRICAL & COMPUTER ENGINEERING

FACULTY RESEARCH PROFILES



Reza Abdolvand
Associate Professor
Ph.D., Electrical Engineering
Georgia Institute of Technology, 2008



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407-823-1760

Research: <http://www.eecs.ucf.edu/~reza/>

- *Micro- and Nano-Electromechanical Systems (MEMS/NEMS)*
- *Micro-resonators for timing and data processing*
- *Resonant Sensors*
- *Ultrasonic Techniques for Bio-fluid Analysis at Small Scale*
- *Infrared Sensing*
- *Micro-fabrication*

Ongoing Research Projects

- Low-Loss Piezoelectric-on-Diamond Filter Arrays for Multi-Band Telecommunication (NSF)
- Nano-Engineered Thermoelectric Infrared Sensor Arrays (Amethyst Research Inc. & NSF)
- Ultra-stable MEMS Oscillators (Internally Funded)
- Ultrasonic Micro-Sensors for Bio-Fluid Analysis (Internally Funded)

Professional Activities

- Frequent NSF panel reviewer
- Technical reviewer for several journals including IEEE Transaction on Ultrasonics, Ferroelectrics, and Frequency Control, IEEE Journal of Micro-Electro-Mechanical (JMEMS), IEEE Transaction on Electron Devices, Journal of Sensors and Actuators

Honors & Awards

- Member of National Academy of Inventors since 2013
- Granted 12 US patents

George Atia
Assistant Professor
Ph.D., Electrical and Computer Engineering
Boston University, 2009



Contact:
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407-823-3467

Research: <http://www.eecs.ucf.edu/~atia/>

- *Statistical and sparse signal processing*
- *Machine learning and big data analytics*
- *Controlled sensing and stochastic control*
- *Optical signal processing*
- *Neurological modeling and brain computer interfacing*
- *Security of cyber-physical systems*
- *Cooperative communications and dynamic spectrum sharing*

Ongoing Research Projects

- Inference-Driven Data Processing and Acquisition: Scalability, Robustness and Control (NSF)
- Development of Diffraction-Free Space-Time Optical Beams (ONR)
- Advanced Ion Channel Models for Neurological Signal Processing (NSF)

Professional Activities

- Senior Member, IEEE
- Technical Committee Member, Machine Learning for Signal Processing (MLSP), 2017-Present.
- Vice Chair, Machine Learning and Adaptive Signal Processing Track, Asilomar Conference on Signals Systems and Computers, 2018.
- NSF Panel Reviewer
- Technical reviewer for IEEE Transactions on Signal Processing, Information Theory, IEEE Signal Processing Magazine, IEEE Signal Processing Letters, IEEE/ACM Transactions on Networking, Algorithmica.
- Organizer and Chair of the GlobalSIP Symposium on Controlled Sensing for Inference: Applications, Theory and Algorithms, 2013.

Amro Awad
Assistant Professor
Ph.D., Computer Engineering
North Carolina State University, 2016



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407-823-1304

Research: <https://sites.google.com/site/amroawad/home>

- *Computer Architecture*
- *Memory Systems*
- *Hardware Security*
- *Emerging Non-Volatile Memories (NVMs)*
- *Next-Generation Data Centers*

Ongoing Research Projects

- Non-Volatile Memory Encryption and Data Integrity Verification
- Study for Using Emerging NVMs on Disaggregated Memory Systems

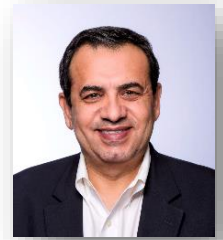
Professional Activities

- Frequent NSF panel reviewer
- Conference Program Committee Membership: IISWC 2017, ISCA 2017, ISCA 2017 (EPC)
- Technical reviewer for several journals including: IEEE Computer Architecture Letters (CALs), IEEE Transactions on Computers (TC) and Transactions on Very Large Scale Integration Systems (TVLSI)

Honors & Awards

- Awards for filing several patents with AMD Research and HP Labs
- Dean's and University's honor lists in JUST University

Issa Batarseh
Professor
Ph.D., Electrical Engineering
University of Illinois at Chicago, 1990



Contact:
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407-823-0185

Research: <http://fpec.ucf.edu>

- *Power Electronics*
- *Energy Conversion*
- *Grid-tied Inverters*
- *Smart Distributed Solar Energy*
- *Photovoltaics (PV) Systems*

Ongoing Research Projects

- High-Density Soft-Switching Multi-Port Photovoltaic Power Manager
- Integrated Solar energy with Storage
- Florida Energy Systems Consortium (State of Florida)

Professional Activities

- Director of the Energy System Integration Division, FSEC
- NASA Technical Board Member
- Served as panelist, and reviewer for NSF, DoE, NASA and several IEEE Transaction and other international journals
- Served as General Chair for IEEE-PESC'07 and SOUTHEASTCON'98 conferences
- IEEE Orlando Section Chair
- Technical program committee chair of IEEE APEC, PESC, IECON, IAS and ISCAS Registered Professional Engineer, Florida

Honors & Awards

- *Florida Inventors Hall of Fame, Inductee, 2017*
- National Academy of Inventors (NAI) Fellow, 2016
- Research Incentive Award, 2011, 2015
- *FES Outstanding Technical Achievement Award, 2017*
- AAAS Fellow, 2009
- IEEE Fellow, 2005
- IEEE Power Electronics Society, *IEEE Transactions on Power Electronics Prize Paper Award Davis Productivity Award for Best Invention*, given by the State of Florida, 2004
- IEE Fellow, 2003

Aman Behal**Professor**

Ph.D., Electrical Engineering
Clemson University, 2001

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Research: <http://www.eecs.ucf.edu/~abehal/>

- *Rehabilitation Robotics*
- *Wheelchair Mounted Assistive Robotic Arms*
- *Autonomous and Semi-Autonomous Control*
- *Human Robot and Human Computer Interaction*
- *Applications of Computer Vision*
- *Applied Nonlinear Controls*

Ongoing Research Projects

- CHS: Small: Empowerment of Disabled Individuals via an Adaptive Framework for Indirect Human-Robot Interaction (NSF)
- CHS: Medium: Collaborative Research: Social Learning in Mixed Human-Robot Groups for People with Disabilities (NSF)

Professional Activities

- Associate Editor, IEEE Transactions on Control Systems Technology
- Associate Editor, Journal of Aerospace Engineering
- Associate Editor, Conference Editorial Board, IEEE Control Systems Society
- Proposal Reviewer for NSF, NIDILRR, NIH, NASA, NMSS

Honors & Awards

- Senior Member – IEEE
- Charles N. Millican Faculty Fellow, 2016 onwards
- UCF Millionaires Club, 2015

Kenle Chen**Assistant Professor**

Ph.D., Electrical Engineering
Purdue University, 2013

**Contact:**

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Research:

<https://scholar.google.com/citations?user=dmOhpLMAAAAJ&hl=en>

- *Radio-frequency and millimeter-Wave integrated circuits*
- *Future-generation (5G) wireless communication systems*
- *High-speed, wideband, and high-efficiency radio solutions*
- *Reconfigurable high-frequency circuits*
- *Interdisciplinary applications of radio technology*

Ongoing Research Projects

- Linear, efficient, and wideband RF PAs/transmitters for 5G communications (internally funded)
- Mode-reconfigurable RF power amplifiers (internally funded)

Professional Activities

- Active Referee: 15 International Journals, e.g., TMTT, MWCL, TCAS-I, TCAS-II, and TBioCAS.
- TPC Member: WAMICON
- TPRC Member: IMS, WAMICON
- Conference Session Chair: IMS

Honors & Awards

- IEEE MTT-S Doctoral Fellowship (2012)
- IEEE MTT-S Design Competitions Winners (2011, 2012, 2018)

Ronald F. DeMara**Professor**

Ph.D., Computer Engineering
University of Southern California, 1992

**Contact:**

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Research: <http://cal.ucf.edu/>

- *Computer Systems Design and Architecture*
- *Emerging Computing Devices for Machine Learning*
- *Adaptive and Reconfigurable Hardware*

Ongoing Research Projects

- Probabilistic Spin Logic for Low-Energy Boolean and Non-Boolean Computing (NSF, 2017-2020)
- Probabilistic Spin Circuits & Benchmarking (Semiconductor Research Corporation (SRC), 2017-2020)
- Cross-layer Adaptive Rate/Resolution Design for Energy-Aware Acquisition of Spectrally Sparse Signals Leveraging Spin-based Devices (NSF, 2018-2021)
- Synthesis and Design Workshop: Digitally-Mediated Team Learning (NSF, 2018-2019)
- Digitizing and Remediating STEM Assessments (ITPF, Technology Fee Award, 2016-present)

Professional Activities

- Lead Guest Editor of IEEE Transactions on Computers joint with IEEE Transactions on Emerging Topics in Computing, Special Section “Innovation in Reconfigurable Computing Fabrics: from Devices to Architectures” (2018) and Special Section on “Emerging Non-volatile Memory Technologies: from Devices to Architectures and Systems” (2019)
- Keynote: IEEE 24th Reconfigurable Architectures Workshop
- Topical/Senior Editor of IEEE Transactions on Computers
- Technical Program Committee member of IEEE Symposium Series on Computational Intelligence (SSCI), IEEE Annual Symposium on VLSI (ISVLSI), IEEE Non-Volatile Memory Systems and Applications Symposium (NVMSA), Workshop on Energy-Efficient Big Data Analytics, Track chair of ACM Great Lakes Symp. on VLSI (GLSVLSI)
- NSF Panelist and Reviewer for various IEEE/ACM/ASEE journals and conferences
- IEEE Senior Member, Member of ACM, ASEE, and AAAS

Honors and Awards

- Online Learning Consortium (OLC) Effective Practice Award (2018)
- Marchioli Collective Impact Award (2017)
- Scholarship of Teaching & Learning Award (2017, 2008)
- Teaching Incentive Award (2017, 2006, 2001, 1996)
- Excellence in Undergraduate Teaching (2017)
- Research Incentive Award (2009, 2004)
- Distinguished Research Lecturer, Advisor of Year
- IEEE Outstanding Engineering Educator – Region 3 (2008)

Aleksandar Dimitrovski**Associate Professor**

Ph.D., Power Engineering
Saints Cyril and Methodius University, 1997

**Contact:**

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Research: <http://www.eecs.ucf.edu/dimitrovski>

- *Modeling and Analysis of Uncertain Power System*
- *Magnetic-Electronic Power Controllers*
- *Parallel Simulation of Large Power Systems*
- *Power System Protection*
- *Microgrid Protection and Control*

Ongoing Research Projects

- Magnetic Amplifier for Power Flow Control (US DOE)
- Power System Parallel Dynamic Simulation Framework for Real-Time Wide-Area Protection and Control (US DOE)
- Scalable/Secure Cooperative Algorithms and Framework for Extremely-high Penetration Solar Integration (US DOE)

Professional Activities

- IEEE Senior Member
- Member of CIGRE (International Council on Large Electric Systems)
- Reviewer for IEEE Transactions on: Power Systems, Power Delivery, Smart Grid, Sustainable Energy; IEEE Systems Journal; IEEE Power Engineering Letters; IET: Generation, Transmission, Distribution; International Journal of Electric Power and Energy Systems

Honors and Awards

- Fulbright Scholar (2016)
- R & D 100 (2014)

Chinwendu Enyioha
Assistant Professor

Ph.D., Electrical & Systems Engineering
University of Pennsylvania, 2014

Contact:

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407-823-0122



Research: <http://enyioha.eecs.ucf.edu>

- *Distributed optimization, decision theory and control over networks*
- *Resource-aware computation in distributed systems*
- *Safety and security in Cyber-physical systems (CPSs)*

Ongoing Research Projects

- Resource Management with Limited Communications in CPNs
- Segmentation for Safety in CPS.

Professional Activities

- Invited session organizer and co-chair, IEEE American Control Conference (2016)
- Session Chair, IEEE American Control Conference (2018)
- Technical Reviewer for several IEEE/ACM conferences and journals including the IEEE Transactions on Automatic Control (TAC), Transactions on Network Science and Engineering (TNSE), Transactions on Control of Networked Systems (TCNS), Journal of Optimal Control, Applications and Methods, amongst others
- Member, IEEE and SIAM.

Honors and Awards

- Fellow, Ford Foundation (administered by the NRC of the National Academies)
- William Fontaine Scholar, University of Pennsylvania
- Patterson Award, Mathematical Association of America (MAA) Southeast section

Rickard Ewetz
Assistant Professor

Ph.D., Electrical and Computer Eng.
Purdue University, 2016

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407-823-4766



Research: <http://www.ece.ucf.edu/~ewetz/>

- *Computer-aided design (CAD) for very large scale integration (VLSI)*
- *Physical Design: Clock network synthesis and timing driven placement*
- *Optimization and design of memristor crossbars with applications within neuromorphic computing and deep learning.*
- *CAD for applications in emerging domains as bio-chips, cloud computing, and data analytics*

Professional Activities

Technical Referee for:

- IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)
- ACM Design Automation of Electronic Systems (TODAES)
- Integration, the VLSI Journal
- International Symposium on Physical Design (ISPD)

Honors and Awards

- Foundation of the Future, Stockholm, Sweden stipend award (2012, 2014)

Yaser P. Fallah**Associate Professor**

Ph.D., Electrical and Computer Engineering
University of British Columbia, 2007

**Contact:**

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Research: <http://www.eecs.ucf.edu/~yfallah>

- *Networked Cyber-Physical Systems: Modeling of Hybrid Systems*
- *Intelligent Transportation Systems: Connected and Automated Vehicles*
- *Wireless Communication and Networking*
- *Smart Cities, Transportation and Energy Systems*
- *Electric vehicles and powertrain control*

On-going research projects:

- CAREER: Multi-Resolution Model and Context Aware Information Networking for Cooperative Vehicle Efficiency and Safety Systems, National Science Foundation, NSF CAREER - PI
- V2V Communication Research: Safety Networks, Communication and Congestion Control, CAMP (US-DoT NHTSA) - PI
- Modeling and Control of Information Driven Smart Transportation Systems, collaborative project with Texas A&M Univ., Qatar National Research Fund, QNRF – PI
- Cooperative Vehicle Safety System Emulation, Ford Motor co, PI
- Autonomous Vehicle Information Networking and Sensor Processing, Toyota ITC, USA - PI

Professional Activities

- Associate Editor, IEEE Transactions on Vehicular Technology
- Chair, Program Committee, IEEE International Symposium on Wireless Vehicular Comm., WiVEC 2011, 2014
- Steering Committee Member, IEEE Connected Vehicle Initiative (VTS)
- Workshop Chair, IEEE Cyber Science and Tech. Conf. 2017
- Chair, IEEE Workshop on V2X Communication: Applications and Technology, Oct. 2015
- Co-Chair, Technical Program Committee, Conference on Smart Urban Mobility Services (SUMS) 2015

Honors and Awards

- Outstanding Researcher Award - West Virginia University, College of Engineering (2016)
- NSF Career Award (2015)
- NSERC Canada Post-Doctoral Fellowship (2008)
- Bell Canada Graduate Award (2005)

Deliang Fan**Assistant Professor**

Ph.D., Electrical and Computer Engineering
Purdue University, 2015

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Research: <http://www.eecs.ucf.edu/~dfan/>

- *Ultra-low Power In-Memory Computing based on Non-Volatile Memory*
- *Deep Learning Neural Network*
- *Brain-inspired (Neuromorphic) and Boolean Computing Using Emerging Nanoscale Devices like Spintronics and Memristors*
- *Low Power Digital and Mixed Signal CMOS Circuit Design*

Ongoing Research Projects

- Ultra-Low Energy Brain-Inspired Computing using Nanoscale Emerging Spintronic Devices
- Non-Volatile In-Memory Processing Unit: Memory, In-Memory Logic and Deep Neural Network (NSF, SRC)

Professional Activities

- Member of IEEE, ACM
- Technical Referee for:
 - IEEE Transactions on Neural Networks and Learning Systems
 - IEEE Transactions on Very Large Scale Integrated Systems
 - IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems
 - IEEE Transactions on Emerging Topics in Computing
 - IEEE Transactions on Circuits and Systems I
 - IEEE Magnetics Letters
 - IEEE Computer
 - IEEE Journal on Emerging and Selected Topics in Circuits and Systems
- TPC member of DAC, ICCAD, ASP-DAC, GLSVLSI, ISVLSI, ISQED
- Financial Chair of ISVLSI 2019
- Technical Area Chair of ISQED 2019
- Local Chair of CyberSciTech/DASC/PICom/DataqCom 2017
- Session chair of DAC, ICCAD, ASP-DAC, ICCD, ISVLSI, GLSVLSI

Honors & Awards

- Best Paper Award in IEEE Computer Society Annual Symposium on VLSI, Hong Kong, China, 2018
- Front Cover Paper in IEEE Transactions on Magnetics, Vol. 54, No.2, Feb. 2018
- Best Paper Award in IEEE Computer Society Annual Symposium on VLSI, Bochum, Germany, 2017

Michael Georgiopoulos
Professor, Dean of CECS
Ph.D., Electrical Engineering
University of Connecticut, 1986



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Research: <http://www.eecs.ucf.edu/georgiopoulos/>

- *Machine Learning*
- *Neural Networks*
- *Pattern Recognition*
- *Applications of Machine Learning*

Ongoing Research Projects

- Collaborative Research: RET in Engineering and Computer Science Site: Research Experiences for Teachers focused on Applications of ImagEs and SiGnals In High Schools (NSF)
- UCF COMPASS: Convincing Outstanding-Math-Potential Admits to Succeed in STEM (NSF)
- CAMP-YES (Career Advancement Young Entrepreneur and Scholar (YES) Scholarship Program (NSF)
- Flit-Path, Collaborative Research: Florida-IT Pathways to Success (NSF)

Professional Activities

- Senior Member IEEE

Honors & Awards

- UCF Undergraduate Student Mentor of the Year Award (2009-2010)
- Scholarship of Teaching and Learning (SoTL) Award (2009-2010)
- UCF Pegasus Award (2010)
- College of Engineering TIP (Teaching Incentive Productivity) Award (1995, 2000, 2005)
- RIA, Research Incentive Award (2005)
- UConn Academy of Engineering (2014)

Xun Gong
Professor
Ph.D., Electrical Engineering
University of Michigan, 2005



Contact:
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Research: <http://people.cecs.ucf.edu/xgong>

- *Microwave Filters and Passive Components*
- *Wireless passive sensors for harsh environment applications*
- *Antennas, phased arrays, and reflectarrays*
- *Flexible electronics*
- *Micromachining*
- *Advanced packaging*
- *Ceramic materials, polymer materials, and ferroelectric materials & Material characterization*

Ongoing Research Projects

- Customizable Antenna Array Using Pixelated and Reconfigurable Slot-Ring Antennas (DARPA)
- Integrating High Frequency Whispering – Gallery Mode Phononic Cavities with Efficient Electrically-Small Antennas: Pushing the Limits of Wireless Passive Sensing (NSF)
- EARS Directional Spectrum Sensing and Communications Utilizing Beam- and Frequency-Agile Parasitic Antenna Arrays (NSF)

Professional Activities

- General Chair: 2012 WAMICON and 2016 iWAT
- ExCom Member: IMS, WAMICON, SiRF, IMBioC
- TPC Chair: AP-S/URSI Int. Symp., RWS, WAMICON, SiRF, iWAT
- TPC Member: AP-S/URSI Int. Symp., IMS, RWS, WAMICON, SiRF, WiSNET, EuCAP, EuMW, IMBioC"
- Editor: IEEE TMTT, IEEE MWCL, IET MAP Special Issue, IEEE Microwave Magazine Special Issue
- IEEE AP/MTT Orlando Chapter Chair, 2007-2010
- IEEE Orlando Section Awards Chair (2012-2013), Chair (2011), Vice Chair (2009-2010), and Secretary (2008)

Honors & Awards

- UCF Lockheed Martin Professorship (2018-2023)
- UCF Reach for the Stars Award (2016)
- UCF Research Incentive Award (2011, 2016)
- UCF Teaching Incentive Program Award: (2010, 2015)
- UCF CECS Distinguished Researcher Award (2013)
- UCF CECS CAE Link Faculty Fellow (2010-2012)
- NSF Faculty Early Career Award (2009)

Zhishan Guo**Assistant Professor**

Ph.D., Computer Science

University of North Carolina at Chapel Hill, 2016

**Contact:**Zhishan.guo@ucf.edu

407-823-0124

Research: <https://sites.google.com/view/zhishanguo>

- *Modeling and analysis of real-time systems*
- *Machine learning theory and neural networks*
- *Secured and energy-aware cyber-physical systems*

Ongoing Research Projects

- CRII: NeuroMC – Parallel Online Scheduling of Mixed-Criticality Real-Time Systems via Neural Networks (NSF)
- CPS: Collaborative Research: Trusted CPS from Untrusted Components (NSF)
- F1/10 Autonomous Racing Robots (Internally Funded)
- Scalable Memory and Storage Management via Neural Networks (Internally Funded)

Professional Activities

- Member of IEEE and ACM
- NSF review panelist
- TPC chair of Workshop on Mixed Criticality (2018)
- TPC member of numerous IEEE/ACM conferences including: RTSS, EMSOFT, RTAS, ICPADS, ICCCN, ICONIP, etc.
- Reviewer of numerous IEEE/ACM transactions including: TNNLS, TVT, TCAD, TETCI, TC, TPDS, TIFS, TKDE, TECS, etc.; and others including: JSA, IPL, JoSH, PMC, etc.

Honors & Awards

- Outstanding Teaching Award, CS Department, UNC-Chapel Hill (2015)

Michael Haralambous**Assistant Professor**

Ph.D., Electrical Engineering

George Washington University, 1978

**Contact:**Michael.Haralambous@ucf.edu

407-823-2548

Research: <http://people.cecs.ucf.edu/haralambous>

- *The application of Kalman Filtering to Cooperative Control*
- *Robust stabilization and control of certain unstable plants*
- *Ocean Wave Power Generation*

W. Linwood Jones**Professor**

Ph.D., Electrical Engineering
VA Polytechnic Institute & State
University, 1971

**Contact:**

ljones@ucf.edu
wlinwoodjones@gmail.com
407-823-6603

Research: <http://pegasus.cc.ucf.edu/~ljones/>
<http://www.cecs.ucf.edu/cfrsl/>

- *Satellite Microwave Remote Sensing for Ocean, Atmosphere and Global Climate Change*
- *Microwave remote sensor technology development*
- *Active (radar) and passive (radiometry) microwave sensor concepts*
- *Microwave scatterometry, polarimetric radiometry, and synthetic thinned array radiometry*
- *On-orbit Inter-satellite instrument radiometric calibration*
- *Geophysical retrieval algorithm development: ocean vector winds and precipitation in tropical cyclones*
- *Microwave radioactive transfer model development*
- *Airborne & satellite microwave remote sensor computer simulation*

Ongoing Research Projects

- GOLD SALMON project (NASA Headquarters)
- Improved Active/Passive Ocean Vector Wind Retrievals (NASA Headquarters)
- Improved Aquarius Salinity Retrievals using Auxillary Products from the Microwave Radiometer (NASA Headquarters)
- Improved Ocean Vector Retrievals in Extreme Wind Events (Jet Propulsion Laboratory)
- Inter-Satellite Radiometric Calibration for the GPM Constellation (NASA Headquarters)
- Observations of Ocean Surface Wind Speed and Rain Rate with the Hurricane Imaging Radiometer (NASA Marshall Space Flight Center)
- Volcanic Eruption Forecasting Algorithm (Florida Space Grant Consortium)

Professional Activities

- Life Fellow, IEEE
- Geoscience and Remote Sensing Soc, Ocean Engineering Soc, Antennas and Propagation Soc.
- Member American Geophysical Union (AGU)
- Member - Union of Radio Scientists International (URSI), Commission-F

Honors & Awards

- 2016 IEEE JSTARS Best Reviewer Award
- NASA Research: 2015 PMM Science Team Award
- Alan Berman Research Pubs Award, US Naval Research Lab, 2004
- Group Achievement Award, NASA Headquarters, 2015, 2003, 01, 98, 97, 81

Brian Kim**Assistant Professor**

Ph.D., Biophysics
Cornell University, 2013

**Contact:**

Brian.Kim@ucf.edu
407-823-1034

Research: <http://ece.ucf.edu/~bkim/>

- *Low-noise Analog Circuit Design*
- *Monolithic CMOS Biosensors and Actuators*
- *Brain-machine interface*
- *Single-cell Electrophysiology*
- *Accessible Medical Diagnostics Testing*

Ongoing Research Projects

- Monolithic Integration of 1000-ch Neural Interface System on a Single Silicon Die, sponsored by NSF

Professional Activities

- Biophysical Society Member
- Biomedical Engineering Society Member
- IEEE Member
- Served as NSF panelist in 2017 and 2018
- Technical Referee for:
 - IEEE Transactions on Biomedical Engineering
 - IEEE Transactions on Biomedical Circuits and Systems
 - IEEE Transactions on Instrumentations and Measurements
 - IEEE Circuits and Systems Magazine
 - Analytical Chemistry
 - PLOS ONE
 - Microelectronic Engineering
 - Scientific Report
 - Lab on a Chip

Qifeng Li
Assistant Professor

Ph.D., Electrical Engineering
Arizona State University, 2016

Contact:

Qifeng.Li@ucf.edu
617-253-1000



Research: <http://www.mit.edu/~qifengli/>

- *Convex/global Optimization*
- *Nonlinear Systems*
- *Power and Energy Systems*
 - *Demand Side Management*
 - *Networked Microgrids*
 - *Distributed Energy Storage*
 - *Grid Integration of Renewable Energy*
 - *Distribution System Optimization*
- *Energy-Water-Food Nexus*

Ongoing Research Projects

- Intelligent Water-Energy Micro Nexus (MIT/MI Cooperative Program)

Professional Activities

- IEEE Member
- Frequent invited speaker in seminars
- Technical Referee for:
 - IEEE Transactions on Power Systems
 - IEEE Access
 - Energies
 - IEEE Transactions on Smart Grid
 - IEEE Transactions on Sustainable Energy
 - IEEE Transactions on Power Delivery
 - Journal of Energy Engineering
 - IEEE Power Engineering Letters

Honors & Awards

- China National Scholarship 2012

Mingjie Lin
Associate Professor

Ph.D., Electrical Engineering
Stanford University, 2008

Contact:

Mingjie.Lin@ucf.edu
407-882-2298



Research: <http://www.eecs.ucf.edu/~mingjie/>

- *Bio-Inspired Logic Design with Graph and Field Theory*
- *Minimum-Energy Bio-Inspired Computing with Emerging Spintronic Devices*
- *Hardware-Assisted Large-Scale Neuroevolution for Multiagent Learning and Robotic Control*
- *Computer Architecture/Compiler, and Reconfigurable Computing*

Ongoing Research Projects

- Bio-Inspired Logic Design with Graph and Field Theory (NSF)
- Minimum-Energy Bio-Inspired Analogic Computing Devices with Stochastic Switching Transistors under Ultra-Low VDD (NSF)
- Metaphysical and Probabilistic-Based Computing Transformation (NSF)

Honors & Awards

- UCF Reach for the Star Award (2017)
- UCF CECS Dean's Advisory Award (2017)
- UCF Teaching Incentive Program Award: (2016)
- NSF CAREER AWARD (2016)
- SAIC Faculty Fellowship in Electrical Engineering

Wasfy B. Mikhael
Professor
Ph.D., Electrical Engineering
University of Concordia, 1973



Contact:
Wasfy.Mikhael@ucf.edu
407-823-3210

Research: <http://people.cecs.ucf.edu/mikhael>

- *Digital Signal Processing*
- *Adaptive Signal Processing*
- *One and Multidimensional Signal Compression*
- *Filtering with Applications such as*
 - *Speaker Recognition*
 - *Image Classification/recognition*
 - *Interference Cancellation in Wireless Communications*
 - *Multi-Signal Fusion*

Ongoing Research Projects

- DSP Application for Facial Recognition, Human Action Recognition, Biometric Signals Machine Learning, etc.

Professional Activities

- Has more than 350 refereed publications
- Holds several patents in his field
- Serves on editorial boards
- Chaired several international, IEEE and other conferences
- Served as VP for the IEEE Circuits and Systems Society
- Chair of the Midwest Symposium on Circuits and Systems steering committee membership

Honors & Awards (Samples)

- Fellow, IEEE, 1987
- UCF, CECS Teaching Incentive Award (TIP), April, 2016, April 2011, April 2006, April 2000, 1994
- UCF, CECS Graduate Teaching Award, 2006
- UCF Undergraduate Teaching Award
- UCF, CECS Research Incentive Award, 2005, 1993
- Best Paper Awards from International Conferences, 2015, 2014
- Professional Societies Awards, 2014, 2013

Junjian Qi
Assistant Professor
Ph.D., Electrical Engineering
Tsinghua University, 2013



Contact:
Junjian.Qi@ucf.edu
407-823-1305

Research: <http://www.ece.ucf.edu/~jqj/>

- *Cascading Blackout and Grid Resilience*
- *Power System Stability and Control*
- *Power Grid Cybersecurity*
- *Distributed Energy Resources*
- *Synchrophasor*

Ongoing Research Projects

- Enhancing Power System Resilience and Cybersecurity by Advanced Analytics (Argonne National Laboratory)

Professional Activities

- Secretary, IEEE Task Force “Voltage Control for Smart Grids”
- TPC Member, 2017 IEEE International Conference on Smart Grid Communications (SmartGridComm)
- TPC Member, Fifth International Symposium on Control, Automation, Industrial Informatics and Smart Grid (ICAIS’17)
- Technical reviewer for Proc. IEEE, IEEE Trans. Power Systems, IEEE Trans. Smart Grid, IEEE Trans. Automatic Control, IEEE Trans. Control Systems Technology, IEEE Trans. Sustainable Energy, IEEE Trans. Reliability, IEEE Trans. Industrial Informatics, IEEE Trans. Control of Network Systems, IEEE Power Engineering Letters, IEEE Systems Journal, IEEE Journal on Emerging and Selected Topics in Circuits and Systems, IET Generation, Transmission & Distribution, Physica A, and Communications in Nonlinear Science and Numerical Simulation

Honors & Awards

- Best Conference Paper in IEEE PES General Meeting (2014)
- Argonne Outstanding Postdoctoral Performance Award (2016)

Zhihua Qu
Professor and Chair of ECE
Director of FEEDER Center
Ph.D., Electrical Engineering
Georgia Institute of Technology, 1990



Contact:
qu@ucf.edu
407-823-5976

Research: <http://www.ece.ucf.edu/~qu>

- *Systems Theory and Control*
- *Optimization and Control of Networked Dynamical Systems*
- *Distributed Control and Optimization for Smart Grid*
- *Autonomous Vehicle Systems*
- *Medical Robotics*

Ongoing Research Projects

- FEEDER (Foundations for Engineering Education for Distributed Energy Resources) Consortium, one of the national-network centers funded under the GEARED program (US Department of Energy)
- FEEDER: Strategic Expansion to Achieve GEARED Goals (STEP) (by DOE)
- Novel Guidance and Control Algorithms for Missile Defense Systems (L-3 Communications Coleman Aerospace)
- Scalable/Secure Cooperative Algorithms and Framework for Extremely-high Penetration Solar Integration (US Department of Energy)

Professional Activities

- Associate Editor, Automatica
- Associate Editor, IEEE ACCESS
- Advisory Board, International Journal of Robotics and Automation
- Vice President, ECEDHA
- Board of Directors and Secretary, SCEEE
- Past President, SECEDHA
- Director, ECE Systems & Control Laboratory
- Director, ECE Robotics Laboratory
- Director, UCF Medical Robotics Laboratory

Honors & Awards

- Fellow, IEEE
- Fellow, AAAS
- SAIC Endowed Professorship
- Pegasus Professor
- Lockheed Martin Corporate Award
- Technology Transfer Award, NASA
- ECEDHA service award
- IEEE Distinguished Lecturer

Nazanin Rahnavard
Associate Professor
Ph.D., Electrical and Computer Engineering
Georgia Institute of Technology, 2007



Contact:
nazanin@eecs.ucf.edu
407-823-1762

Research: <http://cwnlab.eecs.ucf.edu/>

- *Compressive Sensing: New Designs and Applications*
- *Radio Frequency Cartography*
- *Cooperative Spectrum Sensing and Access in Cognitive Radio Networks*
- *Deep learning theory and applications*
- *High-dimensional data analysis*
- *Wireless Ad-hoc and Sensor Networks*

Ongoing Research Projects

- A Tensor-based Framework for Reliable Radio Cartography (NSF)
- Cross-layer Adaptive Rate/Resolution Design for Energy-Aware Acquisition of Spectrally Sparse Signals Leveraging Spin-based Devices (NSF)
- STEM Transfer Students Opportunity for Nurtured Growth (STRONG) (NSF)
- Deep Intermodal Video Analytics (IARPA)

Professional Activities

- Frequent NSF Panel Reviewer
- Associate Editor for Elsevier Computer Networks Journal
- Member of Technical Program Committee for numerous conferences such as IEEE International Symposium on Information Theory (ISIT), IEEE Global Communications (Globecom), Military Communications (MILCOM), IEEE International Conference on Communications (ICC)
- Technical Reviewer for several journals including IEEE Trans. on Communications, IEEE Trans. on Wireless Communications, IEEE Trans. on Information Theory, IEEE Trans. on Multimedia, and IEEE Wireless Communications Letter

Honors & Awards

- National Science Foundation CAREER award (2011)
- Outstanding Research Award, Center for Signal and Image Processing, Georgia Institute of Technology, 2007
- UCF College of Engineering and Computer Science CAMP-YES Mentor of the Year Award, 2016.

Marwan Simaan
Florida 21st Century Chair
and Distinguished Professor
Ph.D., Electrical Engineering
University of Illinois at
Urbana-Champaign, 1972

Contact:
simaan@eecs.ucf.edu
407-882-2220

Research: <http://www.eecs.ucf.edu/simaan>

- *Optimization and Control*
- *Signal Processing*
- *Knowledge-Based Signal Processing and Control*

Ongoing Research Projects

- Self-organizing Control and Scalable Game-theoretical Dispatch of Distributed Generations for High-Penetration Smart Grids (NSF)
- FEEDER Center (DoE)
- The 21st Century World Class Scholars Program - Simaan Endowed Chair (Florida Board of Governors)

Professional Activities

- Member, IEEE Access Editorial Board
- Member, IEEE Systems Journal Editorial Advisory Board
- Member, AAAS Engineering Section Steering Committee
- Member, AAAS Committee on Fellows
- Member, Integrated Computer-Aided Engineering Editorial Advisory Board

Honors & Awards

- Member, National Academy of Engineering
- Life Fellow, IEEE
- Fellow, NAI
- Fellow, ASEE
- Fellow, AAAS
- Fellow, AIMBE
- Fellow, Electromagnetics Academy
- Distinguished ECE Alumnus Award, Univ. of Illinois
- Distinguished Service in Engineering Award, Univ. of Illinois
- IEEE William E. Sayle Award for Achievement in Education



Wei Sun
Assistant Professor
Ph.D., Electrical and Computer Engineering
Iowa State University, 2011

Contact:
sun@ucf.edu
407-823-2344

Research: <http://www.eecs.ucf.edu/~weisun>

- *Power System Restoration and Self-healing Smart Grid*
- *Resilient and Secure Critical Infrastructure*
- *Cyber-Physical Systems*
- *Renewable Energy and Microgrid*

Ongoing Research Projects

- Collaborative Research: An Intelligent Restoration System for a Self-healing Smart Grid (IRS-SG) (NSF)
- FEEDER: Strategic Expansion to Achieve GEARED Goals (STEP) (US Department of Energy)
- Scalable/Secure Cooperative Algorithms and Framework for Extremely-high Penetration Solar Integration (SolarExPert) (US Department of Energy)
- Developing Cybersecurity Laboratory and Curriculum for Critical Energy Infrastructure (Florida Center for Cybersecurity)
- Cyber-Physical Attacks Recovery in Smart Grids: Security, Resiliency, and Interdependency (Florida Center for Cybersecurity)

Professional Activities

- Director of Siemens Digital Grid Lab
- Associate Editor of Energy Systems
- Co-chair of WG on Power System Restoration in IEEE PES
- Task Lead of Restoration from Cascading Failures in IEEE PES CFWG
- Panel Chair in IEEE conferences, including Innovative Smart Grid Technologies, PES General Meeting
- Panelist and reviewers for NSF and DoE

Honors & Awards

- Microsoft Software Engineering Innovation Foundation Award (2014)



Kalpathy Sundaram
Professor and ECE Graduate
Coordinator
Ph.D., Electrical Engineering
Indian Institute of Technology, 1980



Contact:
sundaram@eecs.ucf.edu
407-823-5326

Research: <http://people.cecs.ucf.edu/sundaram>

- *Thin Film Microelectronic Materials and Processing*
- *Optoelectronic Thin Film Materials*
- *Electrostatic Discharge (ESD) and Protection Design and Simulation*

Ongoing Research Projects

- Preparation of Boron Carbon Nitride (BCN) films by RF Sputtering (Intel Corporation)
- Electrostatic Discharge (ESD) and Protection Design and Simulation (ADI)

Professional Activities

- IEEE Senior Member
- Member of Electrochemical Society
- IEEE Orlando Section, Education chair, Historian

Honors & Awards

- Thomas Callinan Award, Dielectric Science & Technology Division of ECS
- 2014 IEEE Student Branch Counselor Award
- Fellow, Electrochemical Society (ECS 2013)
- 2008 Outstanding Engineer, IEEE Region-3
- 2008 UCF Teaching Incentive Program (TIP) Award
- 2011 Outstanding Service Award, IEEE Region-3

Azadeh Vosoughi
Associate Professor
Ph.D., Electrical and Computer Engineering
Cornell University, 2006



Contact:
azadeh@ucf.edu
407-882-0137

Research: <http://www.eecs.ucf.edu/~vosoughi>

- *Communication theory and wireless communications*
- *Detection and estimation theory*
- *Distributed detection, estimation, and data fusion with communication constraints*
- *Optimization and fundamental limits of cooperative wireless data communication networks*
- *Spectrum sensing for cognitive radio networks*
- *Modern communications for smart grids*
- *Brain signal processing*
- *Enhanced radio spectrum via directional sensing and communications*

Ongoing Research Projects

- Advanced Ion Channel Models for Neurological Signal Processing Theory and Application to Brain-Computer Interfacing (NSF)
- Directional Spectrum Sensing and Communications Utilizing Beam- and Frequency-Agile Parasitic Antenna Arrays (NSF)
- Power-Constrained Distributed Vector Estimation in Wireless Sensor Networks (NSF)
- CAREER: M-ary Distributed Detection in Wireless Sensor Networks (NSF)
- Foundations for Engineering Education for Distributed Energy Resources (DoE)

Professional Activities

- Frequent NSF review panelist
- TPC Member of numerous IEEE conferences including: ICC, SPAWC, GLOBECOM, DCOSS, PIMRC, VTC, WCNC, MILCOM, WCSP

Honors & Awards

- NSF Faculty Early Career Award (2011)
- Wilmot Assistant Professor in College of Arts, Sciences, and Engineering at the University of Rochester
- Recipient of Furth Award for Junior Faculty at the University of Rochester (2006)
- UCF CECS CAE Link Professorship (2018-2013)

Parveen F. Wahid
Professor, Associate Chair
of ECE and Undergraduate Program
Coordinator of EE and CpE
Ph.D., Electrical Communication Engineering
Indian Institute of Science, Bangalore, India, 1979



Contact:
Parveen.Wahid@ucf.edu
407-823-2610

Research: <http://cecs.ucf.edu/wahid>

- *Antenna Miniaturization*
- *Antennas for Biomedical Applications*

Professional Activities

- General Chair, IEEE APS/USNC-URSI International Symposium, 2013
- IEEE WIE Committee Member, 2012-2014
- Associate Editor, IEEE Antennas and Propagation Magazine, 2001
- Reviewer, IEEE Transactions on Antennas and Propagation
- Reviewer IEEE Antennas and Wave Propagation Letters
- IEEE Orlando Section, Chair WIE Committee, 2012

Honors and Awards

- Provost Faculty Fellow, 2013
- Women of Distinction: Excellence in Mentoring Award, UCF Center for Success of Women Faculty, 2012
- Provost Teaching Faculty Fellow, 2011
- Teaching Incentive Program (TIP), College of Engineering and Computer Science
- Excellence in Teaching Award, 2010
- Excellence in Professional Service Award, College of Engineering and Computer Science, 2010

Jun Wang
Professor
Ph.D., Computer Science and Engineering
University of Cincinnati, 2002



Contact:
Jun.Wang@ucf.edu
407-823-0449

Research: <http://www.eecs.ucf.edu/~jwang>

- *Big Data and Big Learning Computer Systems*
- *Massive Storage and File Technology*
- *Data Intensive Computing*

Ongoing Research Projects

- CCF/SHF: Multi-criteria optimization control for temperature constrained energy efficient data center using fuzzy decision making theory (NSF)
- SHF: Small: Developing a Highly Efficient and Accurate Approximation System for Warehouse-Scale Computers with the Sub-dataset Distribution Aware Approach (NSF)
- DURIP: Army Research Laboratory, Next-generation all flash big data parallel processing engine.

Professional Activities

- Associate editor for the IEEE Transactions on Parallel and Distributed Systems 2012 - 2014; 2016-present
- Associate editor for the IEEE Transactions on Cloud Computing 2016-present
- Program co-Chair for 2018 the 20th IEEE Conference on High Performance Computing and Communications
- Local arrangement chair for the IEEE/ACM IPDPS'17

Honors & Awards

- University of Central Florida Research Incentive Award 2017
- UCF Reach for the Stars Award, 2015
- University of Central Florida Dean's Research Professorship Award 2013
- University of Central Florida Research Incentive Award 2010
- Charles N. Millican Faculty Fellow in EECS at University of Central Florida, 2010
- US National Science Foundation Early Career Award, 2009
- US Department of Energy Early Career Principal Investigator Award, 2005
- Senior Member of IEEE

Arthur Weeks
Associate Professor
Ph.D., Electrical Engineering
University of Central Florida, 1987

Contact:
Arthur.Weeks@ucf.edu
407-823-0767

Research: <http://people.cecs.ucf.edu/weeks/>

- *Biomedical Sensors*
- *Patient Monitoring*
- *Tele Healthcare*
- *Image Processing*
- *Wireless Computing*

Honors & Awards

- 2009-2010 Teaching Incentive Program Award



Lei Wei
Associate Professor
Ph.D., Electrical Engineering
University of South Australia, 1996

Contact:
Lei.Wei@ucf.edu
407-823-5098

Research: <http://people.cecs.ucf.edu/lei/>

- *Bio-logically inspired signal processing*
- *Modulation and error control coding*
- *Wireless communications*
- *Homeland security for campus emergency alert*

Ongoing Research Projects

- Collaborative Research: RET in Engineering and Computer Science Site: Research Experiences for Teachers focused on Applications of ImagEs and SiGnals In High Schools (NSF)

Professional Activities

- Member of Technical Program Committee and Section Chair of Southeastcon 2012, Orlando, FL

Honors & Awards

- Who's Who in America, 2010
- Semi-finalists in Homeland Security Awards from Columbus Fellowship in June 2007



Fan Yao
Assistant Professor

Ph.D., Computer Engineering
The George Washington University, 2018

Contact:

Fan.Yao@ucf.edu
407-823-0147



Research: <http://ece.ucf.edu/~fanyao/>

- *Computer Architecture*
- *Secure Processor Architectures*
- *Hardware Security*
- *System Security*
- *Energy Efficiency Computing*
- *Cloud Computing*

Ongoing Research Projects

- Detection and defenses for microarchitecture information leakage attacks
- Accelerating symbolic execution for automated vulnerability discovery using graph theory
- Energy efficiency optimization for latency-critical workloads in data centers

Professional Activities

- Conference Program Committee: ICCD 2019, MICRO SRC 2018, ICDIS 2018
- Journal Technical Reviewer: IEEE Transactions on Cloud Computing (TCC), Journal of Hardware and System Security (HASS), Journal of Information Security and Applications (JISA), Journal of Computer and System Sciences (JCSS)
- Organizing Committee: HPCA 2019

Honors & Awards

- NSF GW I-Corps Site Grant Award, 2018
- The Norris & Betty Hekimian Engineering Endowment Fellowship, GWU, 2017

Jiann S. Yuan
Professor

Ph.D. Electrical Engineering
University of Florida, 1988

Contact:

Jiann-Shiun.Yuan@ucf.edu
407-823-5719



Research: <https://sites.google.com/site/yuanjs168/>

- *Semiconductor devices and ICs*
- *Analog, mixed-signal, and RF circuits*
- *Ultra-low power spiking neural network using emerging RRAMs for neurons and synapses*
- *GaN power devices and reliability analysis*
- *Hardware security*
- *Internet of things*

Ongoing Research Projects

- Industry/University Cooperative Research Center: Multi-functional Integrated System Technology (MIST), NSF, Principal Investigator
- Industry support (Intersil and BRIDG) for MIST projects
- REU Supplement, NSF, Principal Investigator
- Securing the Internet of Things (IoT) from the Hardware and Deep Learning Perspectives, Florida Center for Cybersecurity, Principal Investigator

Professional Activities

- Editor, IEEE Transactions on Device and Materials Reliability, 2002-present
- Distinguished Lecturer, *IEEE Electron Devices Society*, 2006-present
- Reviewer, IEEE Transactions on Electron Devices, IEEE Transactions on Circuits and Systems, Electron Device Letters, Microelectronics Reliability

Honors & Awards

- UCF Pegasus Professor Award, 2016
- TIP Award, University of Central Florida, 2015, 2010, 2004, 1996
- RIA Award, University of Central Florida, 2004
- Distinguished Lecturer, IEEE Electron Devices Society, 2006-present
- Outstanding Engineering Award, IEEE Orlando Section, 2002
- Outstanding Researcher Award, College of Engineering and Computer Science, 2002
- Outstanding Engineering Educator Award, Florida Council of IEEE, 1993

Murat Yuksel
Associate Professor
Ph.D. Computer Science
Rensselaer Polytechnic Institute, 2002



Contact:
Murat.Yuksel@ucf.edu
407-823-4181

Research: <http://www.ece.ucf.edu/~yukse>

- *Networked, wireless and computer systems*
- *Optical wireless*
- *Spectrum sharing*
- *Device-to-device systems*
- *Cloud networking*
- *Network architectures and economics*

Professional Activities

- Editor; IEEE Networking Letters; 2018-Present
- Editor; Computer Networks, Elsevier; 2014-Present
- NSF panelist
- Steering Committee Member; IEEE LANMAN Symposium (2015- Present) ACM CoNEXT CAN Workshop (2017-2018)
- Chair; ACM CoNEXT CAN 2016, IEEE LANMAN 2014
- TPC Member; IEEE ICNP, IEEE INFOCOM, ACM VLCS, IEEE ICCN, IEEE GLOBECOM, IEEE ICC

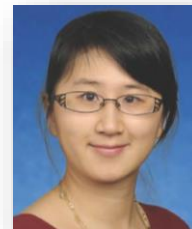
Honors & Awards

- Best Demo Award; IEEE LANMAN 2018, Washington, DC
- Faculty Excellence Award; College of Engineering, UNR, 2016
- Senior Member; ACM, 2015
- Best CSE Researcher Award; Computer Science and Engineering, UNR, 2014
- Senior Scholar Award; College of Engineering, UNR, May 2014
- Senior Member; IEEE, 2011
- Best Paper Award; IEEE LANMAN 2008
- Best Paper Nominee; IEEE ISCC 2003
- Achievement Award; Sun Labs, 2001
-

Ongoing Funded Research Projects

- Multi-Element Mobile Visible Light Communication for Smart Cities (by NSF)
- Stable and Efficient Peering Through Internet Exchange Points (IXPs) (by NSF)
- Modeling and Development of Resilient Communication for First Responders in Disaster Management (by NIST)
- US Ignite: Rapid and Resilient Critical Data Sourcing for Public Safety and Emergency Response (by NSF)
- Pervasive Spectrum Sharing for Public Safety Communications (by NSF)
- Multi-Element Illumination for Mobile Free-Space-Optical Networks (by NSF)

Qun Zhou
Assistant Professor
Ph.D. Electrical Engineering
Iowa State University, 2011



Contact:
Qun.Zhou@ucf.edu
407-823-3284

Research: <http://www.eecs.ucf.edu/~qzhou/>

- *Data Analytics in Power Systems*
- *Energy Forecasting*
- *Renewable Energy Integration*
- *Power Economics and Power Market*

Ongoing Research Projects

- Deep Learning in Sensor-Enabled Energy Systems (DeepSEES) (by SCEE)
- FEEDER: Strategic Expansion to Achieve GEARED Goals (STEP) (by DOE)

Professional Activities

Technical Referee for:

- IEEE Transactions on Power Systems
- IEEE Transactions on Smart Grid
- IEEE Transactions on Sustainable Energy
- IEEE Power Engineering Letters

Electrical and Computer Engineering

Facts & Figures

EE and CpE Programs

- BSEE, BSCpE
- MSEE, MSCpE
- PhDEE, PhDCpE

US News and World Report (2019 Rankings)

- Electrical Engineering 55 (out of 183 ranked programs)
- Computer Engineering 53 (out of 145 ranked programs)

Faculty & Staff

- 36 Tenured/Tenure-Track Faculty (13 Professors, 10 Associate Professors, 13 Assistant Professors)
- 6 Lecturers/Instructors (Including 1 Senior Lecturer and 1 Associate Lecturer)
- 4 Research Faculty Members
- 13 Joint Faculty Members
- 4 Emeritus Professors
- 2 Staff Engineers
- 7 Office Staff Members

External Recognitions

- 1 Member of National Academy of Engineering
- 11 Fellows of IEEE
- 5 Fellows of AAAS
- 1 Fellow of ASEE
- 1 Fellow of AIMBE
- 1 Fellow of ECS
- 7 NSF Career Awardees
- 2 DoE Young Investigator Awardees
- 4 Fellows of National Academy of Inventors

Degrees Conferred (AY 2017-2018)

- 125 BSc EE and 117 BSc CpE
- 37 MSc EE and 42 MSc CpE
- 19 PhD EE and 7 PhD CpE

Centers Competitively Awarded at the National Level

- FEEDER Consortium, one of national-network centers funded by US Department of Energy under the GEARED program, 2013-2018
- MIST Center, and I/UCRC on Multi-Functional Integrated System Technology, funded by NSF, 2014 -2019



Electrical and Computer Engineering

UNIVERSITY OF CENTRAL FLORIDA

