Electrical & Systems Engineering

Phone: 314-935-5565
Website: https://ese.wustl.edu/academics/graduate-programs/index.html

Faculty

Chair

Bruno Sinopoli
Das Family Distinguished Professor
PhD, University of California, Berkley
Designs safe and secure networked embedded control systems

Endowed Professors

Shantanu Chakrabartty
Clifford W. Murphy Professor
Vice Dean for Research and Graduate Education
PhD, Johns Hopkins University
Explores frontiers in analog and neuromorphic integrated circuits

Jr-Shin Li
Newton R. and Sarah Louisa Glasgow Wilson Professor of Engineering
PhD, Harvard University
Studies complex large-scale systems arising from emerging physical, biological and medical applications

Joseph A. O'Sullivan
Samuel C. Sachs Professor of Electrical Engineering
Dean, UMSL/WashU Joint Undergraduate Engineering Program
PhD, Notre Dame University
Discovers ways to improve CT imaging & optical imaging

Lan Yang
Edward H. & Florence G. Skinner Professor of Engineering
PhD, California Institute of Technology
Focuses on advanced nano/micro photonic devices with outstanding optical properties

Professor

ShiNung Ching
Associate Chair for Research
PhD, University of Michigan
Engineering Neuroscience, Dynamics, Control

Associate Professors

Xudong Chen
PhD, Harvard University
Develops revolutionary methods for analysis and control of large-scale multi-agent systems

Andrew Clark
PhD, University of Washington
Focused on control and security of networked and cyber-physical systems

Ulugbek Kamilov
PhD, École Polytechnique Fédérale de Lausanne, Switzerland
Advances imaging technology through research on computational imaging, computer vision, machine learning and optimization

Matthew Lew
Associate Chair for Academic Programs
PhD, Stanford University
Builds new nanoscale imaging technologies

Jung-Tsung Shen
PhD, Massachusetts Institute of Technology
Exploits the unique properties of quantum nano-photonics for applications in quantum communication, computation and biomedical imaging

Chuan Wang
Director of Graduate Programs
PhD, University of Southern California
Develops large-scale and cost-effective materials for flexible and stretchable electronic systems

Assistant Professors

Hong Hu
PhD, Harvard University
Developing theoretical foundations for high-dimensional information processing

Ioannis (Yiannis) Kantaros
PhD, Duke University
Designs safe and distributed autonomy algorithms for large-scale multi-robot systems

Mark Lawrence
PhD, University of Birmingham
Builds novel systems and devices for applications in telecommunications, computing and quantum information

Janet Sorrells
PhD, University of Illinois at Urbana-Champaign
Developing new technologies in label-free nonlinear optical microscopy to enable new applications in biology and medicine

Shen Zeng
PhD, University of Stuttgart
Develops data-integrated computational approaches for controlling complex dynamic systems

Senior Professors

Paul S. Min
PhD, University of Michigan
Routing and control of telecommunication networks, fault tolerance and reliability, software systems, network management

Robert E. Morley Jr.
DSc, Washington University in St. Louis
Computer engineering, lower-power VLSI design, computer architecture, signal processing, microprocessors systems design

Hiro Mukai
PhD, University of California, Berkeley
Theory and computational methods for optimization, optimal control, systems theory, electric power system operations, differential games

Daniel L. Rode
PhD, Case Western Reserve University
Optoelectronics and fiber optics, semiconductor materials, light-emitting diodes and lasers, semiconductor processing, electronics

Ervin Y. Rodin
PhD, University of Texas at Austin
Optimization, differential games, artificial intelligence, mathematical modeling

Heinz Schaettler
PhD, Rutgers University
Optimal control, nonlinear systems, mathematical models in biomedicine

Barbara A. Shrauner
PhD, Harvard University (Radcliffe)
Plasma processing, semiconductor transport, symmetries of nonlinear differential equations

Barry E. Spielman
PhD, Syracuse University
High-frequency/high-speed devices, radiofrequency and microwave integrated circuits, computational electromagnetics

Tzyh Jong Tarn
DSc, Washington University
Quantum mechanical systems, bilinear and nonlinear systems, robotics and automation, life science automation

Professors of Practice

Dennis Mell
MS, University of Missouri–Rolla
Focuses on cross-disciplinary applications of robotics and automation systems

Ed Richter
MS, Washington University
Designs and develops biomedical signal processing systems including analog instrumentation, digital circuits with microcontrollers and FPGAs, and application programming; teaches electrical and computer engineering lab courses in FPGA design and development and signal processing and communications

Jason Trobaugh
DSc, Washington University
Ultrasound imaging, diffuse optical tomography, image-guided therapy, ultrasonic temperature imaging

Teaching Professor

James Feher
PhD, Missouri University of Science and Technology
Interested in the use and implementation of open source hardware and software as it is applied to engineering education

Vladimir Kurenok
PhD, Belarus State University (Minsk, Belarus)
Focuses on studying and applications of random models under low regularity assumptions

Senior Lecturers

Martha Hasting
PhD, Saint Louis University
Mathematics education

Tsitsi Madziwa-Nussinov
PhD, University of California, Los Angeles
Teaches Introduction to Electrical and Electronic Circuits

Dorothy Wang
PhD, Virginia Tech
Fiber optic sensing, electro-optical sensors

Jinsong Zhang
PhD, University of Miami
Focused on signal, data and information processing with applications to engineering systems

Lecturers

Michael Hall
PhD, Washington University in St Louis
Teaches computer engineering, preparing students with essential skills and knowledge to achieve their professional goals and contribute to technological advancements that benefit society

Ben Wormleighton
PhD, University of California, Berkeley
Seeks to cultivate formative learning spaces and practices that develop creative and communal thinkers

Professors Emeriti

R. Martin Arthur
Newton R. and Sarah Louisa Glasgow Wilson Professor of Engineering
PhD, University of Pennsylvania
Ultrasonic imaging, electrocardiography

Arye Nehorai
The Eugene & Martha Lohman Emeritus Professor of Electrical Engineering
PhD, Stanford University
Statistical signal processing, machine learning, imaging, biomedicine