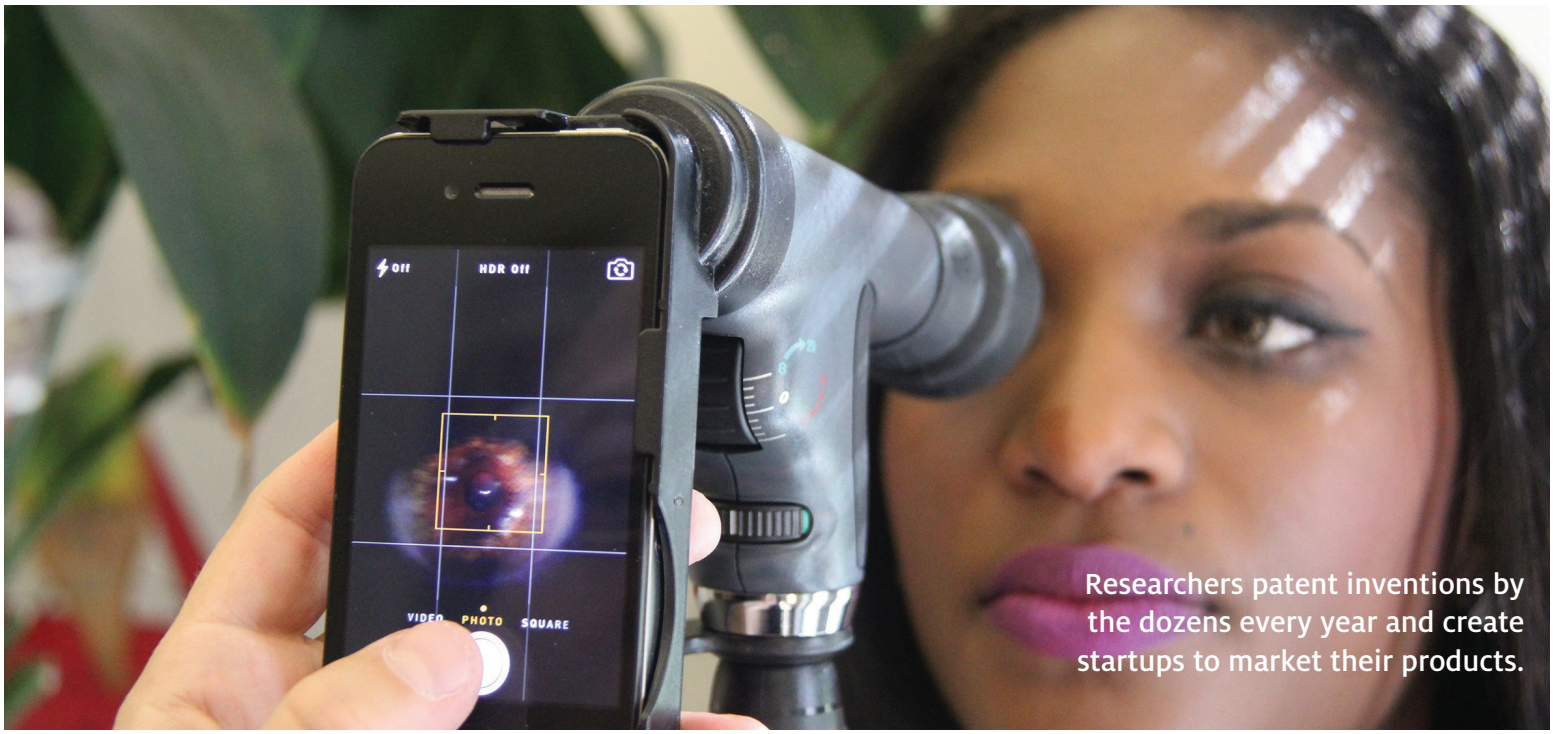
COLLEGE OF ENGINEERING
Electrical & Computer Engineering

GRADUATE STUDIES
Harnessing the entrepreneurial spirit



Researchers patent inventions by the dozens every year and create startups to market their products.

Research Focus Areas
- Autonomous systems and robotics
- Biomedical technologies
- Circuits, microelectronics and very-large-scale integration
- Communications, coding and information theory
- Computer architecture and cloud/distributed computing
- Optics, photonics and terahertz devices and systems
- Signal, image and video processing
- Software engineering and embedded systems
- Wireless networking, security and systems

Centers & Institutes
- Arizona Research Institute for Solar Energy
- Broadband Wireless Access Center
- Center for Quantum Networks
- Center to Stream Healthcare In Place
- Cloud & Autonomic Computing Center
- Wireless Innovation towards Secure, Pervasive, Efficient & Resilient Next G Networks

Job Placement
- Amazon
- Apple
- IBM
- Intel
- Microsoft
- Qualcomm
- Raytheon Technologies
- Texas Instruments

Top 20
U. S. public research institution
(National Science Foundation and Times Higher Education)

Top 25%
computer engineering graduate programs
(U.S. News & World Report)

"You get to be a part of the research. It's not just something you take part in. You get to own your piece of it."
- Ian Patrick Armstrong, ECE BS and MS graduate

Degrees
PhD and MS
(online MS option)

Application Deadlines
- Fall: December 15
- Spring: July 15

Contacts
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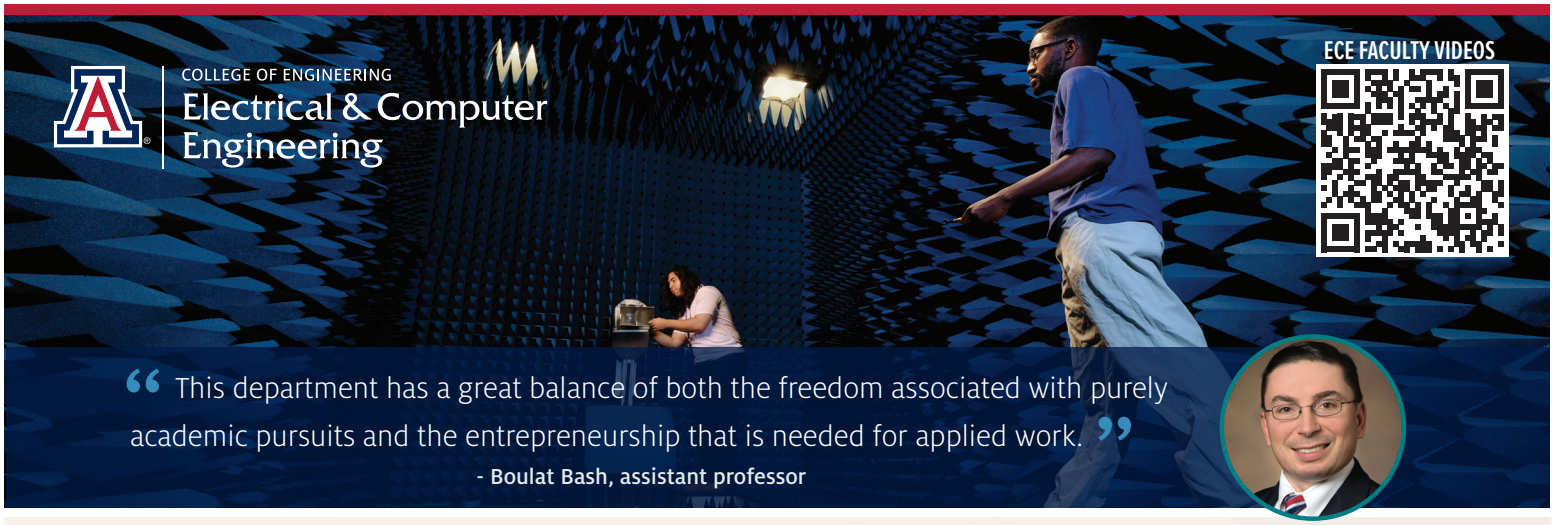

Faculty Expertise

Mai Abdel-Malek – mmalek@arizona.edu
logic design • programming languages • wireless communication

Tosiron Adegbija – tosiron@arizona.edu
high-performance embedded computing • low-power embedded systems design

Ali Akoglu – akoglu@arizona.edu
high-performance computing • reconfigurable computing • adaptive hardware systems

Ehsan Azimi – eazimi@arizona.edu
medical robotics • augmented reality • human computer interaction • immersive learning control

Boulat Bash – boulat@arizona.edu
applying information theory to practical problems of reliability and security

Ali Bilgin – bilgin@arizona.edu
signal and image processing • data compression • magnetic resonance imaging

Siyang Cao – caos@arizona.edu
radar signal processing • adaptive radar systems • innovative sensing systems

Jyotikrishna Dass – jdass@arizona.edu
distributed machine learning • edge AI • systems architecture for high-performance machine learning

Ivan B. Djordjevic – dvorak@arizona.edu
optical communications and networks • quantum information processing

Wolfgang Fink – wfink@arizona.edu
artificial vision • autonomous robotic space exploration • biomedical sensors

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communications • computing • quantum and classical sensing

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autonomic cybersecurity • big data analytics • resilient cloud services

Dale Hetherington – dalehetherington@arizona.edu
electronic circuits • embedded microcontrollers • semiconductor processing

Marwan Krunz – krunz@arizona.edu
wireless networks • cognitive and software-defined radios • MIMO communications

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network security • algorithms • network optimization • wireless communications

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computer vision • signal and image processing • medical image analysis • machine learning • embedded systems

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information security and privacy • wireless networking • cybersecurity

Bo Liu – boliu@arizona.edu
reinforcement learning and control • explainable AI • safe AI

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novel imaging systems • machine vision and pattern recognition systems • infrared and RF automatic target recognition

Michael W. Marcellin – mwm@arizona.edu
digital communication and data storage systems • data compression • signal processing

Michael M. Marefat – marefat@arizona.edu
intelligent systems • computer vision and robotics • machine learning

Kathleen Melde – melde@arizona.edu
antennas for computing • wildlife tracking • microwave circuit design

Kelly Potter – kspotter@arizona.edu
response of optical materials and devices to ionizing and non-ionizing radiation

Narayanan Rengaswamy – narayananr@arizona.edu
classical and quantum error correction, quantum computing, quantum networking, quantum communications

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signal-image-video processing and analysis • automated image analysis

Janet Meiling Roveda – meilingw@arizona.edu
smart grid and smart home • VLSI systems for biomedical applications • multicore design

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design and analysis of complex systems • modeling and computer simulation

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security, signal conversion and processing in IoT • neuromorphic and biologically-inspired AI hardware, emerging spin-based devices • computer architectures • VLSI circuits

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information and coding theory • wireless communications • machine learning

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control theory • engineering education

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data management • theory of computation • programming languages • machine learning and computer algorithms

Bane Vasic – vasic@arizona.edu
coding theory • information theory • digital communications • memory and storage systems

Michael Wu – mhwu@arizona.edu
cybersecurity, mobile computing, wireless networks, computer communications

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machine learning • artificial intelligence • robustness • privacy • fairness

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machine learning • artificial intelligence • computer organization

Danella Zhao – danellazhao@arizona.edu
domain-specific computing, hardware security and privacy-preserving edge computing, autonomic computing, quantum computing