2022-2023

GRADUATE ADVISOR DIRECTORY





Daniel Felix Ritchie School of Engineering & Computer Science



THE EXCITEMENT OF NEW BEGINNINGS

Your time in graduate school lays the foundation for your future. That's why we're excited that you're considering the Ritchie School of Engineering and Computer Science at the University of Denver!

The Ritchie School is home to state-of-theart labs and classrooms, a vibrant community, and innovative faculty.

This booklet will serve as your starting point for finding the right faculty advisor.

4 TIPS FOR FINDING YOUR ADVISOR

Make grad school a transformative experience by finding the best advisor for you.

- Search for mutual research interests. The most important criteria to consider when deciding on a dissertation advisor are the research interests of the faculty members in your department. Ideally, a graduate student should select a dissertation advisor who has a successful, active scholarly agenda in the area the student is researching.
- Does the advisor understand your desired career path?

 While having high expectations is great, tenure-track positions at major institutions may not be your particular goal. You may desire a career at a teaching institution, an administrative position, or an alt-ac career altogether. Your advisor must be clear on your goals and be willing to support you in whatever you decide.
- Can you see yourself spending the next 3 (or 4, or 5, or 6) years working with this individual? It helps tremendously if the personalities of you and your advisor are compatible to some degree. You will spend the next few years after completing your exams working closely with your advisor.
- Don't get discouraged if you do not hear back from faculty quickly as they are often busy in the classrooms and labs. If you haven't heard back from an advisor reach out to Kevin Alt, Kevin.Alt@du.edu and he'll help follow up.



Computer Science

Andrews, Anneliese

Research Specialties: Software testing and

performance

Taking on new students? No

Das, Sanchari

Research Specialties: Computer security, privacy, education, human-computer interaction, social computing, accessibility, and sustainability of digital tech

Taking on new students? Yes

Dewri, Rinku

Research Specialties: Large-scale private record linkage, situational awareness in IoT networks, and usable privacy policies

Taking on new students? No

GauthierDickey, Chris

Research Specialties: Visual programming languages, type systems, compilers, and games

Taking on new students? No

Haring, Kerstin

Research Specialties: Human-robot interaction, social robotics, AI, and robot ethics

Taking on new students? Yes

Hutt, Stephen

Research Specialties: AI, algorithmic bias, machine learning, user modeling, educational technologies, big data, human-centered computing, cognitive science, and learning science

Taking on new students? Yes

Leutenegger, Scott

Research Specialties: Past research includes databases, performance modeling, and computer science education. Current research interests include JEDI (Justice, Equity, Diversity, and Inclusion) in computer science and engineering education, computational/data-driven art, and data-driven JEDI in society

Taking on new students? Yes

Lopez, Mario

Research Specialties: Design and analysis of algorithms, computational geometry, and applications

Taking on new students? Yes

Reardon, Chris

Research Specialties: Al-enabled humanrobot interaction and teaming; emergent technologies and wearables; heterogeneous, multi-robot air-ground teams; real-world and field robotics applications; cognitive and perception systems to enable human-robot teaming

Taking on new students? Yes

Rutherford, Matt

Research Specialties: Autonomous systems, embedded systems, and software engineering

Taking on new students? Yes

Data Science & Cybersecurity MS students work with a dedicated Graduate Enrollment Counselor Kevin Alt

Electrical & Computer Engineering

Arab, Ali

Research Specialties: Blockchain, operations

research, risk and resilience **Taking on new students?** No

Bok, Sangho

Research Specialties: Bio-medical engineering: biosensors, nanotechnology, and point-of-care systems

Taking on new students? Yes

Fan, Rui

Research Specialties: Smart Cities, electric systems,

and AI in power grids

Taking on new students? Yes

Gao, Wenzhong "David"

Research Specialties: Renewable energy and distributed generation, microgrid, smart grid, power system protection, power electronics applications in power systems, power system modeling and simulation, and hybrid electric propulsion systems

Taking on new students? Yes

Khodaei, Amin

Research Specialist: Smart grids, quantum

computing, blockchain, and Al **Taking on new students?** No

Mahmoodi, Seyed

Research Specialties: Bio-medical engineering: electrochemical biosensors, microfluids, bioelectronics and organ-on-a-chip

Taking on new students? Yes

Mahoor, Mohammad

Research Specialties: AI, computer vision, and

social robotics

Taking on new students? No

Matin, Mohammad

Research Specialties: Power electronics and optoelectronics materials, devices and systems, optical and bio-medical signals and image processing

Taking on new students? Yes

Ogmen, Haluk

Research Specialties: Reverse-engineering the brain, natural and artificial intelligence, human vision, attention, and memory

Taking on new students? No

Paredes, Daniel

Research Specialties: Bio-medical engineering: early diagnosis of neurodegenerative disease, neuronal networks, brain circuits, and biomarkers

Taking on new students? Yes

Stefanovic, Margareta

Research Specialties: Control systems

Taking on new students? Yes

Valavanis, Kimon

Research Specialties: Robotics and automation, unmanned systems, intelligent control, and autonomy

Taking on new students? Yes

Mechanical & Materials Engineering

<u>Azadani, Ali</u>

Research Specialties: Cardiovascular mechanics, biofluid mechanics, and heart valve

engineering

Taking on new students? Yes

Clary, Chadd

Research Specialties: Experimental biomechanics, medical devices, and patient

tracking

Taking on new students? No

Davidson, Brad

Research Specialties: Human movement biomechanics, sports science, concussion, physical therapy, and rehabilitation

Taking on new students? Yes

Gordon, Matt

Research Specialties: Plasma physics

Taking on new students? No

Kumosa, Maciej

Research Specialties: High

voltage/temperature materials and structure

Taking on new students? No

Laz, Peter

Research Specialties: Computational biomechanics, probabilistic analysis, fatigue

and fracture

Taking on new students? Yes

Rezazadeh, Siavash

Research Specialties: Robotics, control,

human locomotion

Taking on new students? Yes

Roney, Jason

Research Specialties: Modeling and simulation, computational fluid dynamics, renewable energy simulation, aerosols, and environmental fluid dynamics

Taking on new students? Yes

Rullkoetter, Paul

Research Specialties: Computational biomechanics and joint implant mechanics

Taking on new students? Yes

Sabick, Michelle

Research Specialties: Human movement biomechanics, mechanics of the shoulder and elbow, and biomechanics of baseball pitching

Taking on new students? Yes

Shelburne, Kevin

Research Specialties: Measurement of human biomechanics, multiscale musculoskeletal modeling, simulation of orthopaedic pathology and treatment Taking on new students? No

Yi, Yun-Bo

Research Specialties: Computational mechanics, advanced materials modeling, and mechanical instabilities

Taking on new students? No

Academic Departments & Graduate Programs

COMPUTER SCIENCE

Chair Dr. Chris GauthierDickey | Chris.Gauthierdickey@du.edu

Assistant to the Chair Meredith Corley | Meredith.Corley@du.edu

- MS Computer Science
- PhD Computer Science

- MS Cybersecurity
- MS Data Science

Add CS on Slack! compscidu.slack.com

ELECTRICAL & COMPUTER ENGINEERING

Chair Dr. David Gao | David.Gao@du.edu

Assistant to the Chair Natalie Gregg | Natalie.Gregg@du.edu

- MS Computer Engineering
- MS Electrical Engineering
- MS Mechatronics Systems Engineering
- PhD Electrical & Computer Engineering
- PhD Mechatronics System Engineering

MECHANICAL & MATERIALS ENGINEERING

Chair Dr. Peter Laz | Peter.Laz@du.edu

Assistant to the Chair Sandra Hovey | Sandra.Hovey@du.edu

- MS Bioengineering
- MS Engineering
- MS Materials Science
- MS Mechanical Engineering
- PhD Engineering
- PhD Materials Science
- PhD Mechanical Engineering

