

# GRADUATE ADVISOR DIRECTORY

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2023 - 2024



Photo by: Jas Kitterman



UNIVERSITY OF  
DENVER

**Daniel Felix Ritchie School  
of Engineering & Computer Science**

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# DISCOVER YOUR FUTURE.

Choosing your graduate advisor will shape the course of your studies. Starting your experience with clear expectations and thoughtful communication about your goals is an important step in achieving success in graduate school.

The University of Denver is recognized as an “R1” institution and takes pride in our faculty and scholars who bring forth innovative solutions to today’s grand challenges. At the Ritchie School of Engineering & Computer Science, you will engage with advanced labs and classrooms, a vibrant community, and highly-reputed faculty.

*This guide serves as your starting point for finding a faculty advisor that is a good match and understanding our faculty’s research specialties and interests.*

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# TIPS FOR FINDING YOUR ADVISOR

*Transform your graduate school experience by finding the best advisor for you.*

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

**Prepare your outreach and become familiar with the faculty's research.** When you begin reaching out to potential advisors, become familiar with their recent publications, current or ongoing research, conferences, or projects. This information is available on our website's directory or may be found on a professor's social media account.

**Does the advisor understand your desired career path?** While having high expectations is great, pursuing tenure-track positions at major institutions may not be your particular goal. You may desire a career at a teaching institution, a leading research and development organization, 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. You will spend the next few years after completing your exams working closely with your advisor. Consider personality types of potential advisors and ask yourself if you could have a productive working relationship with them.

**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](mailto:Kevin.Alt@du.edu) and he'll help follow up.

## **Questions to ask a potential advisor:**

Does the advisor consider themselves a 'hands-on' or 'hands-off' advisor?  
What does the advisor generally expect from a student during the quarter?  
Where does funding typically come from?  
How often does the advisor meet with students?

*What are some projects that you and your students are working on?*  
*Do you tend to give your students projects or have students select their own?*  
*What is your feedback style?*

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# Department of Computer Science

Graduate students in the Department of Computer Science join the faculty in conducting cutting-edge basic and applied research in emerging disciplines. All laboratories in the Department of Computer Science contain state-of-the-art equipment and software to support research in algorithms, computational geometry, humane games, machine learning, networks, programming languages, robotics, security and privacy, and software engineering, among other research areas.

## [Das, Sanchari](#)

**Research Specialties:** Computer security, privacy, education, human-computer interaction, social computing, accessibility, and sustainability of digital tech  
*Currently taking on new students.*

## [Dewri, Rinku](#)

**Research Specialties:** Large-scale private record linkage, situational awareness in IoT networks, and usable privacy policies  
*Not taking on new students.*

## [GauthierDickey, Chris](#)

**Research Specialties:** Visual programming languages, type systems, compilers, and games  
*Not taking on new students.*

## [Haring, Kerstin](#)

**Research Specialties:** Human-robot interaction, social robotics, AI, and robot ethics  
*Currently taking on new students.*

## [Hutt, Stephen](#)

**Research Specialties:** AI, algorithmic bias, machine learning, user modeling, educational technologies, big data, human-centered computing, cognitive science, and learning science  
*Currently taking on new students.*

## [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  
*Currently taking on new students.*

## [Lopez, Mario](#)

**Research Specialties:** Design and analysis of algorithms, computational geometry, and applications  
*Currently taking on new students.*

## [Reardon, Chris](#)

**Research Specialties:** AI-enabled human-robot 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  
*Currently taking on new students.*

## [Rutherford, Matt](#)

**Research Specialties:** Autonomous systems, embedded systems, and software engineering  
*Currently taking on new students.*

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# Department of Electrical & Computer Engineering

All laboratories in the Department of Electrical & Computer Engineering contain state-of-the-art equipment and software to support basic and applied research in hardware and software design, hardware/software interfacing, communications and signal processing, image processing, computer vision and pattern recognition, optoelectronics, power and energy systems, robotics, mechatronic systems, intelligent systems, unmanned systems, among other research areas.

## [Bok, Sangho](#)

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

*Currently taking on new students.*

## [Fan, Rui](#)

**Research Specialties:** Smart Cities, electric systems, and AI in power grids

*Currently taking on new students.*

## [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

*Currently taking on new students.*

## [Khodaei, Amin](#)

**Research Specialties:** Smart grids, quantum computing, blockchain, and AI

*Not taking on new students.*

## [Mahmoodi, Reza](#)

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

*Currently taking on new students.*

## [Mahoor, Mohammad](#)

**Research Specialties:** AI, computer vision, and social robotics

*Not taking on new students.*

## [Matin, Mohammad](#)

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

*Currently taking on new students.*

## [Ogmen, Haluk](#)

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

*Not taking on new students.*

## [Paredes, Daniel](#)

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

*Currently taking on new students.*

## [Stefanovic, Margareta](#)

**Research Specialties:** Control systems

*Currently taking on new students.*

## [Sun, Dali](#)

**Research Specialties:** Biosensing, bioinstrumentation, cancer detection, cancer treatment

*Currently taking on new students.*

## [Valavanis, Kimon](#)

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

*Currently taking on new students.*

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# Department of Mechanical & Materials Engineering

Graduate students in the Department of Mechanical & Materials Engineering access well-equipped laboratories containing state-of-the-art equipment and software to support research in biomedical engineering, advanced materials, robotics, mechanical design, and AI/machine learning, among others. Small classes support our multidisciplinary and real-time focus by providing close contact between students and faculty, allowing us to meet students' individual and career goals.

## [Azadani, Ali](#)

**Research Specialties:** Cardiovascular mechanics, biofluid mechanics, and heart valve engineering  
*Currently taking on new students.*

## [Clary, Chadd](#)

**Research Specialties:** Experimental biomechanics, medical devices, and patient tracking  
*Not taking on new students.*

## [Gordon, Matt](#)

**Research Specialties:** Plasma physics  
*Not taking on new students.*

## [Kumosa, Maciej](#)

**Research Specialties:** High voltage/temperature materials and structure  
*Currently taking on new students.*

## [Laz, Peter](#)

**Research Specialties:** Computational biomechanics, probabilistic analysis, fatigue and fracture  
*Currently taking on new students.*

## [Rezazadeh, Siavash](#)

**Research Specialties:** Robotics, control, human locomotion  
*Currently taking on new students.*

## [Roney, Jason](#)

**Research Specialties:** Modeling and simulation, computational fluid dynamics, renewable energy simulation, aerosols, and environmental fluid dynamics  
*Currently taking on new students.*

## [Rullkoetter, Paul](#)

**Research Specialties:** Computational biomechanics and joint implant mechanics  
*Currently taking on new students.*

## [Sabick, Michelle](#)

**Research Specialties:** Human movement biomechanics, mechanics of the shoulder and elbow, and biomechanics of baseball pitching  
*Currently taking on new students.*

## [Shelburne, Kevin](#)

**Research Specialties:** Measurement of human biomechanics, multiscale musculoskeletal modeling, simulation of orthopaedic pathology and treatment  
*Not taking on new students.*

## [Weiss, Dar](#)

**Research Specialties:** Vascular biomechanics, vascular aging and longevity, medical devices  
*Taking on new students in 2024.*

## [Yi, Yun-Bo](#)

**Research Specialties:** Computational mechanics, advanced materials modeling, and mechanical instabilities  
*Currently taking on new students.*

# Academic Departments & Graduate Programs

## DEPARTMENT OF COMPUTER SCIENCE

Chair Dr. Chris GauthierDickey | [chris.gauthierdickey@du.edu](mailto:chris.gauthierdickey@du.edu)

Assistant to the Chair Meredith Corley | [meredith.corley@du.edu](mailto:meredith.corley@du.edu)

Master of Science in Computer Science

Master of Science in Cybersecurity

Master of Science in Data Science

Doctor of Philosophy in Computer Science

*Add CS on Slack! [compscidu.slack.com](https://compscidu.slack.com)*

## DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

Chair Dr. David Gao | [david.gao@du.edu](mailto:david.gao@du.edu)

Assistant to the Chair Natalie Gregg | [natalie.gregg@du.edu](mailto:natalie.gregg@du.edu)

Master of Science in Computer Engineering

Master of Science in Electrical Engineering

Master of Science in Mechatronics Systems Engineering

Master of Science in Systems Engineering

Doctor of Philosophy in Electrical and Computer Engineering

Doctor of Philosophy in Mechatronics System Engineering

## DEPARTMENT OF MECHANICAL & MATERIALS ENGINEERING

Interim Chair Dr. Breigh Roszelle | [breigh.roszelle@du.edu](mailto:breigh.roszelle@du.edu)

Assistant to the Chair Sandra Hovey | [sandra.hovey@du.edu](mailto:sandra.hovey@du.edu)

Master of Science in Bioengineering

Master of Science in Engineering

Master of Science in Materials Science

Master of Science in Mechanical Engineering

Doctor of Philosophy in Engineering

Doctor of Philosophy in Materials Science

Doctor of Philosophy in Mechanical Engineering

*Questions about your application process?*

Visit [ritchieschool.du.edu/graduate-applicants](https://ritchieschool.du.edu/graduate-applicants) or contact our Graduate Admissions Manager Kevin Alt, [Kevin.Alt@du.edu](mailto:Kevin.Alt@du.edu).