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-the-art labs and classrooms, a vibrant community, and innovative faculty.

This booklet will serve as your starting point for finding the right faculty advisor.
Make grad school a transformative experience by finding the best advisor for you.

1. **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.

2. **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.

3. **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.

4. **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.

Some tips are inspired by an article in Inside Higher Education.
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: 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
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 AI
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
<table>
<thead>
<tr>
<th>Name</th>
<th>Research Specialties</th>
<th>Taking on new students?</th>
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<tbody>
<tr>
<td>Azadani, Ali</td>
<td>Cardiovascular mechanics, biofluid mechanics, and heart valve engineering</td>
<td>Yes</td>
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<tr>
<td>Clary, Chadd</td>
<td>Experimental biomechanics, medical devices, and patient tracking</td>
<td>No</td>
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<tr>
<td>Davidson, Brad</td>
<td>Human movement biomechanics, sports science, concussion, physical therapy, and rehabilitation</td>
<td>Yes</td>
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<tr>
<td>Gordon, Matt</td>
<td>Plasma physics</td>
<td>No</td>
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<tr>
<td>Kumosa, Maciej</td>
<td>High voltage/temperature materials and structure</td>
<td>No</td>
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<tr>
<td>Laz, Peter</td>
<td>Computational biomechanics, probabilistic analysis, fatigue and fracture</td>
<td>Yes</td>
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<tr>
<td>Rezazadeh, Siavash</td>
<td>Robotics, control, human locomotion</td>
<td>Yes</td>
</tr>
<tr>
<td>Roney, Jason</td>
<td>Modeling and simulation, computational fluid dynamics, renewable energy simulation, aerosols, and environmental fluid dynamics</td>
<td>Yes</td>
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<tr>
<td>Rullkoetter, Paul</td>
<td>Computational biomechanics and joint implant mechanics</td>
<td>Yes</td>
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<tr>
<td>Sabick, Michelle</td>
<td>Human movement biomechanics, mechanics of the shoulder and elbow, and biomechanics of baseball pitching</td>
<td>Yes</td>
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<tr>
<td>Shelburne, Kevin</td>
<td>Measurement of human biomechanics, multiscale musculoskeletal modeling, simulation of orthopaedic pathology and treatment</td>
<td>No</td>
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<tr>
<td>Yi, Yun-Bo</td>
<td>Computational mechanics, advanced materials modeling, and mechanical instabilities</td>
<td>No</td>
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</tbody>
</table>
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