

RITCHIE SCHOOL OF ENGINEERING & COMPUTER SCIENCE

2021-2022

GRADUATE RESEARCH FACULTY ADVISORS



UNIVERSITY of
DENVER

DANIEL FELIX RITCHIE SCHOOL
OF ENGINEERING &
COMPUTER SCIENCE



THE EXCITEMENT OF NEW BEGINNINGS

Choosing a grad school is a big deal. We get that. That's why we're so excited that you're considering the Ritchie School at the University of Denver!

The University of Denver is well-positioned in the metro area. We are moments away from Downtown Denver and less than two hours away from the Mountains. At the same time, our campus is a close-knit vibrant community.

The Ritchie School of Engineering and Computer Science is home to state-of-the-art labs and classrooms, a vibrant community, and incredible, dedicated, innovative faculty.

The graduate student and faculty advisor relationship is a special once-in-a-lifetime opportunity. Your time in graduate school lays the foundation for your future. This booklet will serve as your starting point for finding the right faculty advisor.

4 TIPS FOR FINDING THE RIGHT ADVISOR

Make grad school a transformational 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 ritchieschool@du.edu and we'll help follow up.

Computer Science

Andrews, Anneliese

Research Specialties: Software testing and performance

Taking on new students? Yes

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, games

Taking on new students? Yes

Haring, Kerstin

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

Taking on new students? Yes

Leutenegger, Scott

Research Specialties: Professor Leutenegger's past research has focused on databases, performance modeling, and computer science education. His 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

Pittman, Dan

Research Specialties: Machine learning, robotics, virtual reality, cybersecurity, and Human-Computer Interaction (HCI)

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, software engineering

Taking on new students? Yes

Data Science & Cybersecurity
MS students work with a
dedicated faculty advisor
Bruce Harmon

Electrical & Computer Engineering

Arab, Ali

Research Specialties: Blockchain, operations research, risk and resilience

Taking on new students? No

Fan, Rui

Research Specialties: Smart Cities, Electric System, 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

Ghosh, Kumar

Research Specialties: Quantum computing

Taking on new students? No

Khodaei, Amin

Research Specialist: Smart grids, quantum computing, blockchain, AI

Taking on new students? No

Mahoor, Mohammad

Research Specialties: Artificial Intelligence, ComputerVision, Social Robotics

Taking on new students? No

Matin, Mohammad

Research Specialties: Research interest is in Power Electronics and Optoelectronics Materials, Device & Systems. Optical & Bio-Medical Signal 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

Valavanis, Kimon

Research Specialties: Robotics and Automation, Unmanned Systems, Intelligent Control, Autonomy

Taking on new students? Yes

Stefanovic, Margareta

Research Specialties: Control Systems

Taking on new students? Yes

Zhu, Zhizhui

Research Specialties: Machine learning, Signal processing, and Optimization

Taking on new students? Yes

Mechanical & Materials Engineering

[Azadani, Ali](#)

Research Specialties: Cardiovascular Mechanics, BiofluidMechanics, Heart ValveEngineering

Taking on new students? Yes

[Clary, Chadd](#)

Research Specialties: Experimental Biomechanics, MedicalDevices, 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

[Rullkoetter, Paul](#)

Research Specialties: Computational biomechanics, joint implant mechanics

Taking on new students? Yes

[Sabick, Michelle](#)

Research Specialties: Human movement biomechanics, mechanics of the shoulder and elbow, 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, Mechanical Instabilities

Taking on new students? No

Academic Departments & Graduate Programs

COMPUTER SCIENCE

Chair Dr. Chris GauthierDickey | 303.871.2458

- MS Computer Science
- PhD Computer Science
- MS Cybersecurity
- MS Data Science

ELECTRICAL & COMPUTER ENGINEERING

Chair Dr. David Gao | 303.871.2458

- 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 | 303.871.2458

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



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