

Ph.D. openings are available in the [Department of Computer Science](#) at the [University of Central Florida \(UCF\)](#) under the supervision of [Prof. Yu Tian](#).

Students will be graduated with a Ph.D. degree in Computer Science. The students will have the opportunity to work and collaborate with world-renowned researchers from the [Center for Research in Computer Vision \(CRCV\)](#) and the newly established [AI Initiative](#) at UCF. Dr. Tian’s lab fosters an inclusive, interactive, and supportive culture. Students will be encouraged and supported through research assistantships, internships, collaborative projects, academic visits, networking opportunities, and scholarships. UCF is a leading institution for computer vision and AI, **ranked 8th in Computer Vision, 47th in AI, and 55th overall in Computer Science according to CSRankings.org.**

CSRankings: Computer Science Rankings

CSRankings is a metrics-based ranking of top computer science institutions around the world. Click on a triangle (▶) to expand areas or institutions. Click on a name to go to a faculty member's home page. Click on a chart icon (the 📊 after a name or institution) to see the distribution of their publication areas as a . Click on a Google Scholar icon (🔍) to see publications, and click on the DBLP logo (📄) to go to a DBLP entry. Applying to grad school? Read this first. For info on grad stipends, check out CSStipendRankings.org. Do you find CSRankings useful? Sponsor CSRankings on GitHub.

Rank institutions in by publications from to

#	Institution	Count	Faculty
1	▶ Carnegie Mellon University 🇺🇸 📊	115.6	34
2	▶ Univ. of California - San Diego 🇺🇸 📊	92.1	30
3	▶ Univ. of California - Berkeley 🇺🇸 📊	90.0	26
4	▶ Univ. of Illinois at Urbana-Champaign 🇺🇸 📊	75.9	24
5	▶ Massachusetts Institute of Technology 🇺🇸 📊	74.7	35
6	▶ Stanford University 🇺🇸 📊	72.5	22
7	▶ Johns Hopkins University 🇺🇸 📊	62.7	14
8	▶ University of Central Florida 🇺🇸 📊	62.4	15
9	▶ University of Maryland - College Park 🇺🇸 📊	61.8	21
10	▶ Boston University 🇺🇸 📊	47.2	10

All Areas [off | on]

AI [off | on]

- ▶ Artificial intelligence
- ▶ Computer vision
- ▶ Machine learning
- ▶ Natural language processing
- ▶ The Web & information retrieval

Systems [off | on]

- ▶ Computer architecture
- ▶ Computer networks
- ▶ Computer security
- ▶ Databases
- ▶ Design automation

About PI: Prof. Yu Tian’s research focuses on computer vision and medical image analysis, with an emphasis on trustworthy AI. His expertise includes abnormality and rarity learning, out-of-distribution detection, fairness learning, interpretability, and federated learning, particularly in biomedical applications. He was a postdoctoral researcher at Harvard and UPenn from 2022 to 2025 and earned his Ph.D. in Computer Science from the Australian Institute for Machine Learning (AIML) at the University of Adelaide, Australia. He has published over 40 papers in top computer vision and medical imaging conferences and journals, including CVPR, ICCV, ECCV, ICLR, AAAI, MICCAI, TMI, and MedIA. His research has received over 1,700 citations (by Dec 2024) according to his [Google Scholar profile](#). For more details on the current (and past) research, please check his [homepage](#).

The students will work on the following Research Topics:

- (1) Trustworthy AI in computer vision and medical imaging (anomaly detection, OoD detection, open-set recognition, long-tailed classification, fairness learning, interpretability, federated learning etc.)
- (2) Multi-modal foundation models (image, text, audio, 3D etc.) for computer vision and medical imaging
- (3) Generative models, AIGC and their applications in biomedicine
- (4) Biomedical AI (in collaboration with Harvard, UPenn and other leading medical schools)
- (5) AI for Science (Solve critical societal and scientific challenges in different domains)

A good candidate in our opinion:

- (1) Undergraduate or MS students with degrees in Computer Science/Engineering, Electrical Engineering, Mathematics, Biomedical Engineering or related areas.
- (2) Be enthusiastic to research and willing to devote themselves to the problem of interest.
- (3) Have a solid background in mathematics (e.g., linear algebra, optimization, probability).
- (4) Have rich coding experiences and solid coding skills (e.g., Python - Pytorch/TensorFlow is necessary).
- (5) Candidates with research experience in computer vision, machine learning, or biomedical AI are preferred.

Interested individuals are encouraged to contact Dr. Yu Tian (tianyu0207@outlook.com) with your resume and transcripts. Our lab is also looking for highly motivated interns/visiting students.

=====

Experience the Magic of Orlando While Pursuing Your Ph.D.

Joining our team at the University of Central Florida (UCF) means embracing a commitment to academic excellence while living in one of the most dynamic and exciting cities in the world—Orlando. As a global hub for innovation and entertainment, Orlando offers an unmatched blend of academic, professional, and recreational opportunities.

Entertainment at Its Finest:

Step beyond your academic pursuits and dive into the enchanting worlds of Disney and Universal Studios, where imagination and innovation thrive. These iconic destinations aren't just for fun—they serve as a reminder that creativity and ambition can make dreams a reality.

Beaches and Natural Beauty:

A short drive from Orlando takes you to some of Florida's most stunning beaches. Whether you're seeking a relaxing day in the sun, thrilling water sports, or a peaceful retreat to enjoy breathtaking ocean views and sunsets, the Atlantic Coast offers it all.

Gateway to Endless Adventures:

Orlando's central location gives you access to Florida's most iconic destinations. From the cultural vibrancy of Miami to the historic charm of St. Augustine and the awe-inspiring Kennedy Space Center, every weekend can be a new adventure.

A Thriving Academic and Professional Ecosystem:

Beyond its attractions, Orlando is home to a booming tech scene, a growing startup community, and numerous networking opportunities. It's the perfect environment for ambitious students to connect, collaborate, and innovate.