UNIVERSITY OF TEXAS ARLINGTON

Center On Stochastic Modeling, Optimization, & Statistics

PhD Openings in Deep Learning / Data Science / AI Intelligent Systems Fall 2024

Multiple Ph.D. positions for Fall 2024 at the Center on Stochastic Modeling, Optimization, & Statistics (COSMOS) at the University of Texas at Arlington. Graduate students with **strong quantitative background and programming *skills, along with experience in machine learning and deep learning,*** are encouraged to apply.

The research directions will be focused on **Deep Learning**, **Data Science,** and **AI Intelligent Systems Development**. If you are interested, please send your CV, transcripts, and any additional documents if you think useful to highlight your experiences and skills (papers, certificates, thesis, awards, etc.) to **Dr. Shouyi Wang at shouyiw@uta.edu**. We will evaluate and give feedback quickly. **Accepted Ph.D. students will work with Dr. Wang and will be provided with full financial support for the entire PhD study. Visiting Students/Scholars Positions** are also available in Deep Learning and Intelligent Systems.

Lab Information: The COSMOS Center is conducting world-leading research in Data Science, Machine Learning, Deep Learning, Complex System Modeling & AI applications in diverse fields include Smart Health, Smart Energy, Smart Agriculture, and Autonomous and Collaborative Intelligent Systems (UAV, UGV, Robotics). *The COSMOS Center PhD graduates are highly competitive in the US job market.* Recent Ph.D. graduates of COSMOS Center obtained jobs at *American Airlines, United Airlines, UPS, CSX, AT&T, IBM, Samsung AI, Bank of America, Comerica Bank, BNSF, General Motors, etc. Our Ph.D. graduates also have immense opportunities to pursue academic careers.* Recent Ph.D. students obtained faculty positions at top schools, including *University of Illinois Chicago, Washington State University, Stevens Institute of Technology, The State University of New York at Buffalo, etc*.

The Current Research Projects & Topics:

- Deep Learning and AI Tools for drug discovery and Life Science Big Data Analytics (e.g., protein, DNA/RNA, molecule deep learning in life science, sponsored by NSF & NIH)
- Deep Learning and AI for Cancer Imaging Analytics (Joint project with University of Washington)
- AI-Driven UAV-UGV Collaborative Smart Systems for Agriculture Applications (work with USDA)
- Probabilistic Deep Learning and Uncertainty Quantification for Multivariate Time Series Forecasting with Applications in Energy and Financial Market Prediction (NSF)
- Deep Learning for Satellite Imaging Analytics and Geographic Information Systems (USDA)
- Interpretable Deep Learning and Machine Learning Research for Decision Analytics

School Information: With more than **40,000** enrolled students, UTA is one of the largest public universities in the nation. According to 2024 U.S. News and World Report, UTA Engineering School is ranked **#69** in the US. The Industrial, Manufacturing, & Systems Engineering (IMSE) Department is ranked #55 for Graduate Programs. With great resources and Texas State support, the IMSE department is one of the fastest growing programs in the US with more than 500 graduate students. UTA is one of the 146 Carnegie R-1 Doctoral Universities in the US with highest research activities.

DFW/Arlington Area: Arlington is located at the center of the US's 4th largest metropolitan area (Dallas/Fort Worth Area) with numerous industrial companies and opportunities. Texas is the leading state for hosting 55 Fortune 500 headquarters, the most among all states in the US. The COSMOS Center at UTA is conducting world-leading research projects and has strong industry support and collaborations.