



Ph.D. Position in Distributed Optimization and Machine Learning

The Distributed Intelligent Systems Laboratory (DISys) in the School of Industrial Engineering and Management at Oklahoma State University, Stillwater is looking to fill a **funded*** PhD position with competitive monthly stipends starting Spring 2027. Prospective students will work on methodologies related to distributed optimization, machine learning and analytics for large scale applications in energy and manufacturing. Particular emphasis will be on leveraging various distributed and decentralized computational tools and paradigms for industrial applications. Candidates with experience and knowledge in C/C++ or Python are especially encouraged to apply.

Areas of Interest

- Distributed Optimization, Machine Learning and Analytics
- Privacy Preserving, Verifiable Computational Methods
- In-Memory Computation for Optimization
- AI Agents for Operations Engineering

Core Requirements

- Bachelor's/Master's degree in Computer Science, Industrial Engineering, Operations Research, Electrical and Computer Engineering or a closely related field.
- Basic conceptual understanding of optimization, analytics and machine learning.
- Good programming skills in either Python, C/C++ or Java.
- Excellent written and oral communication skills.

Bonus Qualifications

- Experience working with solvers such as Gurobi or CPLEX.
- Knowledge of ML frameworks like PyTorch along with basic cryptography knowledge.
- Knowledge of computer architecture and memory paradigms.
- Prior experience with HPC tools such as Message Passing Interface (MPI) and OpenMP.
- Prior experience with container orchestration mechanisms (such as Docker and Podman).
- Knowledge of Agentic AI engineering landscape is a big plus.

Next Steps

Please use the link (<https://airtable.com/appPuheGocvGLxRqx/shrv5Uc2kYsBTVjKQ>) to provide your details such as your CV, cover letter (less than 1-page) describing your research interests and relevant academic records. *Please be sure to highlight prior experience as relevant to the position requirements.* Review of applications will begin immediately and continue until the positions are filled. All applicants must meet the application requirements of IEM and the OSU Graduate College for admission. Selected applicants will be contacted and interviewed virtually. For questions, please email Dr. Paritosh Ramanan at paritosh.ramanan@okstate.edu.

About IEM at OSU

The Industrial Engineering (IE) program at OSU was established in 1925 and is one of the oldest IE programs in the world. Our program has been consistently ranked among the top 40 programs in Industrial Engineering in the United States for many years. The School of Industrial Engineering and Management (IEM) currently has 14 full-time faculty members, approximately 150 undergraduate students and 120 graduate students.

Useful Links

[DISys Lab web page](https://disys-lab.github.io). (<https://disys-lab.github.io>)

[School of Industrial and Engineering Management](https://ceat.okstate.edu/iem) (<https://ceat.okstate.edu/iem>)

*Not applicable to University-wide mandatory fees (<https://bursar.okstate.edu/>).