

Moxin Tang

Nanjing, China
tangmoxin831@gmail.com

Education

Nanjing University

Sep 2023 – Present

B.Eng. in Industrial Engineering

Minor: Computer Science

Rank: Top 20% (People's Scholarship Recipient)

University of California, Berkeley

Aug 2025 – Dec 2025

Visiting Undergraduate Student

Relevant coursework: Efficient Algorithms, Deep Learning, Statistical Prediction and Machine Learning

Research Experience

ICM–MCM (Mathematical Contest in Modeling)

Jan 2026

- Developed a risk-aware stochastic dynamic programming model using Bellman equations for weekly online pricing, and evaluated policies via simulation.

GNN–Based Detection of Disjunctive Structures in MILP

Apr 2025 – Present

OR Lab, Nanjing University

- Investigating the use of GNNs in the preprocessing phase of MILP to identify indicator-variable disjunctions and strengthen LP relaxations.
- Designing graph representations of MILP instances to capture variable-constraint correlations for improved branching heuristics.

In-Context Learning in Diffusion LLMs vs. Transformers

Sep – Dec 2025

Final Project, CS182, University of California, Berkeley

- Evaluated emergent in-context learning in diffusion-based LLMs using the Open dLLM framework against Transformer baselines.

Awards & Honors

Third Prize, CTS Algorithm Competition

Aug 2025

16th International Workshop on Computational Transportation Science

- Designed a two-stage algorithm for airline crew scheduling under complex operational constraints.
- Performed data analysis and implemented heuristic optimization module.

Second Prize, Mathor Cup Mathematical Modeling Competition*Apr 2025*

- Forecasted short-distance parcel demand and optimized vehicle routing strategies.
- Formulated and solved models using mixed-integer linear programming and genetic algorithms.

Second Prize, Huawei Software Elite Challenge*Mar 2025*

11th Huawei Software Elite Challenge, AI Systems Track

- Developed a storage service control system to minimize data fragmentation, optimizing I/O throughput for large-scale AI training clusters.
- Conducted data analysis and collaborated on algorithm design and system optimization.

People's Scholarship (Third Class)*2023 – 2024*

Top 20% in major

Skills

Optimization & OR: Mixed-Integer Linear Programming, discrete and stochastic optimization, mathematical modeling**Machine Learning:** Deep learning models, training and optimization**Programming:** C/C++, Python, PyTorch