

EDUCATION	<div><div>Institute for Interdisciplinary Information Sciences (IIIS), Tsinghua University</div><div>Beijing, China 2024.08 - Present</div></div> <div><div>B.E. in Computer Science and Technology</div><div><ul style="list-style-type: none">Overall GPA: 3.72/4.0.Selected Coursework: Machine Learning (A+), Natural Language Processing (A), AI Principles & Techniques (A+), Algorithm Design (A+), Intro to Computer Systems (A+), Mathematics for CS & AI (A). (Note: Fall 2025 grades are based on instructor notifications; official transcript update pending)</div></div>
PUBLICATIONS	<div><div>1. Huigen Ye, Hua Xu, An Yan, Yaoyang Cheng. Large Language Model-driven Large Neighborhood Search for Large-Scale MILP Problems. In <i>Proceedings of the 42nd International Conference on Machine Learning (ICML 2025)</i>, Spotlight.</div><div>2. Huigen Ye, Hua Xu, An Yan. LLM-driven Streamlining Optimizer for Large-scale Mixed Integer Linear Programming Problems. <i>Submitted to Nature Communications</i> (Under Review).</div></div>
RESEARCH EXPERIENCE	<div><div>Research on Applications of LLMs in Mixed Integer Linear Programming and Combinatorial Optimization</div><div>Research Assistant, Supervised by Prof. Hua Xu, Tsinghua University2024.06 - Present</div></div> <div><ul style="list-style-type: none">Scale neighborhood selection for MILP by evolving heuristic code via a dual-layer LLM agent, enabling zero-shot transfer from small training samples to ultra-large problems with 10^6 variables, generalizing to diverse combinatorial problems.Explored RAG-augmented LLMs for tool-using and long-horizon decision-making in complex optimization pipelines, optimizing branch-and-bound via RAG-initialized code synthesis and iterative Bayesian refinement.(Ongoing) Unify MILP encoding with LLM token spaces through learnable graph tokenizers, leveraging SFT for priority score prediction and GRPO RL with greedy construction to directly optimize solution quality.</div>
SELECTED AWARDS	<div><div><ul style="list-style-type: none">Scholarship for Outstanding Scientific and Technological Innovation, Tsinghua University2025.10Champion, Huawei Algorithm Competition (University Track)2025.09Gold Medal, 2025 Beijing Collegiate Programming Contest2025.04Gold Medal, 10th China Collegiate Programming Contest (CCPC), Jinan Site2024.11Gold Medal, 40th National Olympiad in Informatics (NOI), China2023.07</div></div>
SKILLS	<div><div>Languages: C++, Python (Proficient); Go, Scala, Bash (Familiar).</div><div>Mathematics: Probability Theory, Stochastic Processes, Abstract Algebra, Combinatorics.</div><div>Tools: PyTorch, LaTeX, Git, Docker.</div></div>