TANG MOHAN

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EDUCATION

University of California, Los Angeles (UCLA) *Expected June 2025*
M.S. in Computer Science

University of California, Los Angeles (UCLA) *June 2023*
B.S. in Computer Science, **Magna Cum Laude**
B.S. in Mathematics, **Cum Laude**
Dean's Honors List (all quarters)
Overall GPA: 3.932

EXPERIENCE

Beijing FengYun Health Technology Co., Ltd September 2020 - September 2021
Research Intern *Beijing, China*

- Led a project developing and optimizing a super-resolution algorithm for automated cervical cancer diagnosis.
- Implemented a key algorithm to reduce errors, expanding the original approach based on academic research.
- Derived formulas from physical theories and proposed a novel technique that enhanced the algorithm's applicability.
- Identified and resolved a key source of error with physical simulations.
- *Outcome*: Developed a more robust and stable algorithm, contributing to the company's patent application process.

Post Platform Development (Course: CS 130 - Software Engineering) March 2023 - June 2023
Project Member *Los Angeles, CA*

- Collaborated with a team of 3 to develop a basic post platform using C++ and Object-Oriented Programming.
- Used Gerrit for version control and code review, fostering team collaboration and code integration.
- Deployed the application on Google Cloud to ensure platform accessibility and continuous uptime.
- Wrote comprehensive unit and integration test cases to validate functionality and stability of the platform.

Teaching Assistant - CS 35L: Software Construction, UCLA Computer Science September 2023 - December 2023
Teaching Assistant *Los Angeles, CA*

- Organized weekly discussion sessions and office hours to support student learning.
- Taught foundational knowledge of Linux, Python, Emacs, Lisp, JavaScript, Git, and Makefiles.
- Graded assignments and exams.

UCLA PLUS Lab (Advisor: Nanyun Peng) May 2024 - Present
Research (Co-first Author) *Los Angeles, CA*

- Conducting research on visual data augmentation using generative models and feature extraction.
- Enhancing multi-modal large model capabilities through data synthesis.

RELEVANT COURSES

- **CS 182**: Algorithms
- **CS 131**: Programming Languages
- **CS 111**: Operating Systems
- **CS 118**: Computer Network Fundamentals
- **CS 132**: Compiler Construction
- **CS 130**: Software Engineering
- **CS M152A**: Digital Design Laboratory
- **CS 188**: Deep Learning and Computer Vision
- **CS 260R**: Reinforcement Learning
- **CS 261**: Generative Models
- **Math 182**: Algorithms
- **Math 131BH**: Real Analysis
- **Math 151A**: Numerical Analysis
- **Physics 105A**: Analytical Mechanics
- **Physics 110A**: Electromagnetism

SKILLS

- **Programming Languages**: C++, Java, Python, Matlab, Mathematica, Lisp, Latex
- **Machine Learning**: Pytorch
- **Others**: Linux, Miniconda, Git

AWARDS AND HONORS

2019 William Lowell Putnam Cometition Top 500 February 2020

· Score: 27

PUBLICATIONS

- **Xueqing Wu**, Rui Zheng, Jingzhen Sha, Te-Lin Wu, Hanyu Zhou, Tang Mohan, Kai-Wei Chang, Nanyun Peng, Haoran Huang. "DACO: Towards Application-Driven and Comprehensive Data Analysis via Code Generation", *ICML 2024 Workshop AI4Math Poster*.