# TANG MOHAN

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### **EDUCATION**

University of California, Los Angeles

B.S. in Computer Science B.S. in Mathematics Member of Upsilon Pi Epsilon Dean's Honors List (all quarters) Overall GPA: 3.932

# EXPERIENCE

**Beijing FengYun Health Technology Co.,Ltd** *Research Intern* 

September 2020 - September 2021 Beijing

- · Researched on a wide-field, high-resolution microscope, one major obstacle for automated cervical cancer diagnosis.
- · Applied Fourier ptychographic microscopy.
- · Made existing but unreliable Matlab code work reliably using the theory of Fourier optics.
- Identified and resolved issues by applying theoretical insights and conducting experiments, both with the hardware and software components.
- · Implemented algorithms from academic papers to calibrate several crucial parameters.

# UCLA Applied Mathematics Laboratory [Advisor: Prof. Andrea Bertozzi, Prof. Sarah Burnett] June 2022 -August 2022

Undergraduate Researcher

- · Studied bi-sized particle laden flow.
- · Conducted the experiments and participated in numerical computations.

UCLA BigML [Advis	sor: Prof. Baharan	Mirzasoleiman]
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Undergraduate Researcher

- · Studied data distillation for constrastive learning.
- · Gave mathematical proofs for proposed methods.

# **COURSE PROJECTS**

#### BruinTrade

• Created an online platform where students with extra BruinCard swipes can trade swipes with students who need more swipes for meals.

#### Detecting Communities in State Networks

• Performed community detections on the network of different states of the United States and evaluated how the interactions between different states are geographically oriented.

# **Exploring CLIP**

- Proposed an initialization method dealing with the problem that few-shot classifiers could underperform zero-shot classifier.
- · Trained an semantic segmentation model using CLIP's features.

#### Final Project for COM SCI 188

March 2023 - June 2023

Los Angeles, CA

Los Angeles, CA

Final Project for COM SCI 35L

Final Project for Math 168

June 2023

# AWARDS AND HONORS

# 2019 William Lowell Putnam Cometition Top 500

February 2020

· Score: 27

# SKILLS

Programming Languages	C++, Java, Python, Matlab, Mathematica, Lisp, Latex
Machine Learning	Pytorch
Tools	POSIX Shell, Git