

LUYAO MA

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🎓 EDUCATION

University of California, San Diego (UCSD)

Sep. 2023 - Jun. 2025

M.S. student in Computer Science

Zhejiang University (ZJU)

Sep. 2019 – Jun. 2023

B.Eng. in Computer Science and Technology at College of Computer Science and Technology

- **Performance:** Overall: **3.91/4.0 (89.19/100)** Major: **3.94/4.0 (89.38/100)**
Rank: **Top 5%** among the 248 students with the speciality of Computer Science and Technology
- **Honors Program:** Mixed Class in Chu Kochen Honors College (Top 5% students in Zhejiang University)

⚙️ SKILLS

- Programming Languages: Java, C++, C, Python, SQL, MATLAB, Verilog HDL
- Framework: PyTorch, Qt, OpenGL, OpenCV, LaTeX

📁 COURSE PROJECT

Hospital Online Appointment System | Technical Skills: JavaScript

Jun. 2022

- Worked as a team to implement a hospital online appointment system, with both Doctor-side and Patient-side interactive interfaces and a database that stores relevant information. [Click here](#) to view project repository.
- Developed the doctor-side backend to manage the database and respond to API requests from the frontend.

Video Filter | Technical Skills: Python

Apr. 2022

- Developed a video displayer that can apply 12 different filters to the original video.
- Implemented functions of loading video, choosing and applying a filter, and displaying the filtered video.

Spreadsheet implemented in C++ | Technical Skills: C++

Jun. 2021

- Developed a spreadsheet using **Qt** which supports:
 - Basic editing of cells, including data input and representation of various data formats.
 - The saving and opening of the spreadsheet document.
 - Cell layout, including alignment, cell merging and splitting, cell size settings, and row hiding.
 - Basic data processing functions, including find and replace, filtering, sorting, and formula calculation.

📖 RESEARCH EXPERIENCE

Undergraduate Thesis

Zhejiang University, Jun. 2022 - May 2023

Out-of-distribution(OOD) Sample Detection Model for Molecular Property Prediction Tasks

Technical Skills: Python | **Machine Learning** in Drug Discovery

- Designed the ODIN4MG method, resulting in enhanced detection of OOD samples in molecular property prediction, leading to more accurate predictions.
- Evaluated the performance of three existing OOD detection methods in molecular property prediction tasks.

🏆 HONORS AND AWARDS

1st Prize of Zhejiang University Scholarship (for academic excellence and all-rounded development)

2020

2nd Prize of Zhejiang University Scholarship

2022

Yongping Scholarship in Chu Kochen Honors College (**Top 10% in 600+ students**)

2022

👥 SOCIAL PRACTICE & OTHERS

Volunteer Teaching: Online teaching for students in Honghe Middle School, Yunnan Province

Aug. 2020

Other Voluntary Activity: Volunteer of Smile Pavilion of West Lake; Elderly Home Volunteer Service; Volunteer of Zhejiang University Student Festival; Total volunteer hours over 130h

2019-2021