

# Wenzhou Lyu

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## EDUCATION

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University of California, San Diego

B.S, Dual Majors in **Data Science** and **Math-Computer Science**

San Diego, CA

Expected June 2025

**GPA:** 3.7/4.0

**Relevant Coursework:** Data Structure, Machine Learning, Object Oriented Algorithms and Design, Data Mining, Data Visualization, Database, Deep Learning, Algorithms Design, Recommendation System, Systems Programming

**Awards:** IGEM (International Genetically Engineered Machine Competition) 2018 Bronze, IGEM 2019 Bronze, Provost Honors, Franklin Templeton 2024 AI Contest 1st place.

## SKILLS

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**Programming Languages:** Python, Java, C/C++, SQL, HTML/CSS/JavaScript, Shell, Processing, Git

**Frameworks and Library:** FastAPI, MongoDB, SwiftUI, React.JS, AWS EC2, Django, Express.JS, Node.JS, Postgresql, MySQL, D3.JS, HighChart.JS, Tailwind CSS, Docker, Pytorch, Pandas, Sklearn

## WORK EXPERIENCE

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**Media.Monks**

Shanghai, China

**AI Creative Tech (Software) Intern**

July 2024 - September 2024

- Developed a customized **LLM** based transcreation tool for Under Armor products advertisement, saved **\$10K** USD per year.
- Established multiple AI images generation pipelines for game developments and artistic works .
- Designed and implemented the core algorithms for an **LLM** powered AI books recommendation system for Singapore National Library

**Veriskin**

San Diego, CA

**Research and Development Intern**

October 2023 - December 2023

- Replicated, implemented, and tested time-series ML algorithms from scientific papers to detect skin cancers.

**Contijoch Research Laboratory at UCSD Jacobs School of Engineering**

San Diego, CA

**Undergraduate Researcher**

June 2023 - present

- Applied deep learning approaches (Segmentation, time-series) on IVUS images of coronary arteries to improve the existing diagnostic methods for detecting cardiac allograft vasculopathy
- Co-authored (**2x 1st author, 1x 2nd author**) abstracts (mini paper/poster), and got accepted to conferences presentations (**AHA, BMES**).
- Developed new post-processing quality control algorithms to improve the segmentations results, significantly improving agreement score (Concordance correlation coefficient) from **0.61** to **0.73**

**San Diego Supercomputer Center**

San Diego, CA

**Software Engineer Intern**

July 2022 – Sep 2022

- Created customized functions for the SDSC-developed **Dynamics CRM** package to enable analysts and engineers to more easily interact with the **CRM API** with Python.
- In a Scrum team, built a service dashboard platform with a **React.JS** frontend and a **Django** backend, developing a **RESTful API** to enable data flow and allow customers to monitor billing and service statuses.
- Built ETL pipelines for database transmitting data from **Dynamics CRM** to the dashboard website to enable periodical database updates.

## PROJECTS

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**WhatNext - Co-Founder, Developer** [Demo Link](#)

January 2024 - May 2024

- Developed an **IOS** application with a **language user interface** and conventional social media features, enables conversations with LLMs to provide best recommendations for restaurants and entertainment sites based on user preferences and history. (**SwiftUI, FastAPI, MongoDB, Fine Tuned LLM**)
- Won \$15,000 prize as the 1st place team of the Franklin Templeton 2024 AI Contest, converting to start-up

**Social Media APP (Xsocial)**

August 2023 - October 2023

- Developed a web version WhatsApp-like app with **React/Redux, Express.JS, MongoDB, Tailwind CSS** and **Node.JS**.
- Implemented **Cloudinary API** to enable files transferring between users, supported all common file types.
- Utilized **Socket.io** and **WebRTC** to allow users to chat and video call in real-time.
- Established a **NOSQL** database (MongoDB), and developed RESTful API to enable users to CRUD their relevant data.