# Wenzhou Lyu

San Diego, CA | wlyu@ucsd.edu | Website | 704-898-2448

#### **EDUCATION**

## University of California, San Diego

San Diego, CA

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

Expected March 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**

**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**

Media.Monks

Shanghai, China

July 2024 - Present

- AI Creative Tech (Software) Intern
- Initialized and developed a full stack **LLM** based AI Muti-Agents game, and built customized **RAGS**.
- Established multiple AI images generation pipelines for Unity games developments.
- 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 2 abstracts, and got accepted for conference presentation.
- 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.
- Collaborated in a scrum team to build a service dashboard platform with a frontend using React.JS
   (HTML/CSS/Javascript, Material UI) and integrated with a Django backend.
- Designed and developed the **RESTful API** using **Django REST Framework** to flow data between the backend and frontend to enable customers to monitor their billing and service status, and implemented database **CRUD** operations.
- Built ETL pipelines for database transmitting data from **Dynamics CRM** to the dashboard website to enable periodical database updates.

# **PROJECTS**

### WhatNext - Co-Founder, Developer Demo Link Deck

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. (SwitfUI, 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.