# Yuxuan Zhang

858-729-3152 | yuxuan zhang13@outlook.com | linkedin.com/in/yuxuan-zhang-dexter | github.com/Yuxuan-Zhang-Dexter

#### **EDUCATION**

University of California, San Diego

Master of Science in Computer Science

University of California, San Diego

Bachelor of Science in Data Science

Sep. 2025 – Expected Jun. 2027

Sep. 2021 – March 2025

GPA: 4.0 / 4.0, Summa Cum Laude (Top 2%, highest honor)

## SELECTED HIGHLIGHTS

# • Publications

- Imgame-Bench: How Good are LLMs at Playing Games? (NeurIPS '25 Submitted) Lanxiang Hu, Mingjia Huo, Yuxuan Zhang, Haoyang Yu, Eric P. Xing, Ion Stoica, Tajana Rosing, Haojian Jin, Hao Zhang
- General Modular Harness for LLM Agents in Multi-Turn Gaming Environments (ICML '25 Workshop) Yuxuan Zhang, Haoyang Yu, Lanxiang Hu, Haojian Jin, Hao Zhang

## • Open-Source Projects & Media

- AI GameAgent Co-led an open-source AI-agent framework for classic games (718★) github.com/lmgame-org/GamingAgent
- Agentic Multi-Turn RL Training Library Co-designed a scalable multi-turn RL library for VLMs/LLMs, enabling synchronous rollouts and agent-centric training pipelines github.com/mignonjia/lmgame train reorg
- AI Ace Attorney Gameplay Led AI-agent design and demo that reached 950 k views on X/Twitter x.com/haoailab/status/1912231343372812508

## PROFESSIONAL EXPERIENCE

## **HDSI** Research Assistant

Mar. 2025 - Present

University of California, San Diego, HDSI Department, Dr. Hao Zhang

La Jolla, CA

- Designed and Deployed Gradio App on Hugging Face to visualize performance of 16 AI models across 7 games.
- Led modularization of AI agent architecture for games including 2048, Sokoban, Tetris, Super Mario Bros...
- Building an end-to-end gameplay and evaluation pipeline using Gymnasium (in progress).

# Undergraduate Research Assistant, Hao AI Lab

Jun. 2024 – Mar. 2025

University of California, San Diego, HDSI Department, Dr. Hao Zhang

La Jolla, CA

- Designed and deployed the Game Arena website (Imgame.org) to benchmark LLMs with real-player gameplay.
- Integrated PostgreSQL to compute and update ELO scores for models and users, optimized for scale.
- Developed a multithreaded MySQL + AWS S3 pipeline to process 6.9 TB of logs, achieving a 4× throughput gain.

## Data Scientist Research Intern, Maximov Lab

Apr 2023 – Dec 2024

Scripps Research Institute, Neuroscience Department, Dr. Anton Maximov

La Jolla, CA

- Built a 3D EM neuron segmentation pipeline with Florence/SAM2 models, achieving  $\leq 80\%$  validation accuracy.
- Developed an interactive web app using NeuronGlancer for 3D visualization of 32-bit large-scale neuron datasets.
- Converted 500+ GB of EM images into compressed HDF5, cutting storage by 70%.

# TECHNICAL SKILLS

Programing Languages: Python, Java, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R, Lua Frameworks & Libraries: Pytorch, Ray, DeepSpeed, Gymnasium, Triton, Node.js, PIL, cv2, React, OpenCL Developer Tools: Git, Docker, Kubernetes, PostgreSQL, MySQL, AWS S3, Wandb, MongoDB, Postman, Linux/UI AI API Integration: OpenAI, Google Gemini, Anthropic, Grok, Deepseek, Together AI, and LLaMA

## Honors & Awards

#### Cornell, Maryland, Max Planck Predoctoral Research School

Aug. 2023

Joined a week-long research talk on software systems and informatics at the Max Planck Institute, Germany.

## UCSD HDSI Scholarship Program

Sep. 2023 – Jun. 2024

Awarded a scholarship for a research project proposal, receiving financial support for the academic year.