

Xueyan Shi

☎ (858) 568-0325 | ✉ xushi@ucsd.edu | 🏠 Aaron3963.github.io | 📄 Aaron3963 | 🌐 XueyanShi

Education

University of California, San Diego

Sep. 2021 - Jun. 2025

B.S. IN COMPUTER SCIENCE | COGNITIVE SCIENCE: MACHINE LEARNING AND NEURAL COMPUTATION

- GPA: 3.89

Work Experience

Orient Securities Ltd.

Jun. 2023 - Aug. 2023

QUANTITATIVE INVESTMENT INTERN

Shanghai, China

- Participated in a **minute-wise prediction model** project for a trading strategy targeted for convertible bond [No.123181](#).
- Extract possible indicators from datasets, both manually and by Fin-tech tools like **Tune-TA** and **TA-lib**.
- Applied models on classic regression models from **Scikit-Learn**, as well as deep learning models like **LightGBM** and **LSTM**.
- Provided useful pipelines for the team, including preprocessing, feature detection, training, and result analysis.
- Collect, clean, plot, and analyze data using **Pandas** and **NumPy**.

University of California, San Diego

Sep. 2022 - Nov. 2022

PROJECT RESEARCH ASSISTANT

CA, United States

- Worked with Prof. Onat Gungor on a hyper-dimensional computing research project.
- Provided debriefs collected from literature review articles in the field, report on a weekly basis.

Hanvon Technology Ltd.

Aug. 2021 - Sep. 2021

RESEARCH ASSISTANT INTERN

Beijing, China

- Provided Test feedback and report bugs for next-gen facial recognition smart lock.
- Helped algorithm team collect and label over **10K** of pedestrian image data for traffic monitoring.
- Gathered and reported over 40 recent papers and news about the latest developments in the field.

Gradient Learning

Jul. 2021 - Sep. 2021

STUDENT ADVISORY COMMITTEE

Remote

- Tested the alpha version of Gradient Learning, an online AI learning platform for high school students led by Dr. Andrew Ng.
- Worked with a group of students around the world and learned about project management.

Projects

PawPrints — [GitHub](#) / [Presentation](#)

Feb. 2023 - Jun. 2023

LEAD BACKEND & BLOCKCHAIN DEVELOPER

- Co-founded and developed A **blockchain-powered** platform for pet medical data tracking and sharing.
- Deployed on **Polygon** as testing network, Using **Web3.js** for blockchain interaction, Ran on **React.js** as frontend, **mysql** as database
- Created custom **Solidity** contract and provide cross-verification for pet owners, hospitals, and insurance companies.
- **1st** place winning team of the Franklin Templeton 2023 Blockchain Contest, winning **\$15,000** prize.

Tortoises vs. Dogs Object Detection Algorithm Based on YOLOv5 — [Full Paper](#)

Dec. 2020 - Jul. 2021

INDIVIDUAL RESEARCHER

- **Custom dataset** obtained by my **web crawler**. Excluded duplicate pictures and manually labeled the data. **20K** images total.
- Compared performance between YOLOv5 and other SOTA algorithms. Concluded that it gave up its accuracy in exchange for speed.
- Recorded the experiment and condensed it into an academic paper "Research of Tortoises vs. Dogs Object Detection Algorithm Based on YOLOv5".

Voice-controlled Photo Album for Elders

Sep. 2019 - Jun. 2021

PERSONAL PROJECT

- Using Baidu's voice recognition and generation **API** and Turing API as a **voice assistant**. Users interact using voice commands.
- Remote Picture sharing, using **OpenCV** to rotate and crop pictures automatically.
- Won the **1st place** gold award at the 2019 Youthmaker Technology & Science Fair in Shanghai.

Skills

- Programming:** Java, Python, C/C++, JavaScript, Solidity, CSS, HTML, Bash, SQL, R
- Frameworks:** React, YOLO, TensorFlow, OpenCV, Rest API, Node, GitHub, GDB / Valgrind, JUnit
- HardWare:** Raspberry Pi, Arduino, Robotics control
- Languages:** English (TOEFL 113), Mandarin