Xueyan **Shi**

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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 bound 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 —— GitHub
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