

# Betty (Yuechen) Wu

Palo Alto, CA | bettyyw0120@gmail.com | 650 788 3845 | linkedin.com/in/bettywwu- | bettyyw0120.github.io

## Education

- Stanford University**, School of Engineering Stanford, CA
- **M.S.**, Computer Science; GPA: 4.02 Mar 2024 – Dec 2024
  - **B.S.**, Electrical Engineering and Management Science & Engineering; GPA: 3.98 Sep 2020 – Jun 2024
  - Davis United World College Scholar; relevant coursework: Machine Learning, Natural Language Processing, Operating Systems Principles, Design and Analysis of Algorithms, Distributed Systems

## Skills

**Programming Languages:** Python, C++, C, Java, HTML/CSS/Javascript, MATLAB, R, Stata

**Developer Tools:** Docker, Git, Unix, Terraform, Gradle, AWS, CI/CD Pipelines

**Framework:** React, Bootstrap, Flask, Django, PyTorch, Scikit-learn

## Experiences

- Rivian Automotive, Inc.**, *Software Engineer Intern* – Palo Alto, CA Jun 2024 – Sep 2024
- Led the redesign of **Change Data Capture** (CDC) from DynamoDB streams to events published from services
  - Integrated **Elasticsearch** to enhance search capabilities and real-time querying of event data; utilized **DataHub** for data discovery and lineage tracking
  - Developed a common library to standardize event publishing and processing across multiple micro-services
- SignalPlus Ltd.**, *Crypto Option Trading Intern* – Singapore Jun 2023 – Aug 2023
- Developed and deployed a **Python**-based arbitrage bot for automated high-frequency trading within and across multiple cryptocurrency exchanges; **first 30D Profit & Loss 102.91%**
  - Mitigated liquidation risk and strengthened portfolio stability during market volatility by implementing robust risk management protocols, including stop-loss and dynamic exit strategies
  - Analyzed market data and optimized algorithms for low-latency execution across different exchanges.
- OPPO Mobile Telecommunications**, *Product Manager Intern* – Seattle, WA Apr 2021 – Aug 2021
- Coordinated with product development and marketing teams for the pre-launch of OnePlus Nord CE and Nord 2; co-led the project initiation of Nord 3
  - Conducted market analysis into the Indian and US smartphone markets and interviewed 40 users to design tailored marketing strategies for international expansion

## Research Projects

- Stanford Center for Health Policy**, *Research Assistant* Feb 2023 – Present
- Led data collection for Dr. Karen Eggleston's research on Health Aging in Asia, focusing on ownership structures in the health sectors of China and Korea
  - Designed and implemented models for a **stochastic agent-based network simulation** of Hepatitis C spread among people who inject drugs, in collaboration with Prof. Joshua Salomon
  - Built **ML models** (Neural Network, Random Forest, Logistic Regression) to estimate state-level LGB population
- Stanford School of Engineering**, *Research Assistant* Oct 2022 – Mar 2023
- Developed a Chinese **SentiStrength** model to estimate the level of positive and negative sentiment in short text, and to consider the role of culture value on social media behavior (NSF project)
  - Used **web scraping** to extract Chinese texts from public Twitter API, wrote functions to rate their sentiment level

## Community Project

- Visa Status Tracker** <https://track.moyu.ac.cn>
- Developed an automated system to check US visa status every 6 hours, sending updates via WeChat; implemented CAPTCHA prediction using Convolutional Neural Networks (CNN); **served over 6000 users**
  - Tools Used: Python, Flask, Bootstrap, ONNX, PyTorch, Serverless Function, WeChat Developer API