

Jonathan Xu

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Skills

Languages Python, C/C++, JavaScript, HTML/CSS, Java
Technologies Git, Bash, Docker, Unix, AWS, GCP

Frameworks ReactJS, NodeJS, PyTorch, PostgreSQL,
GraphQL, React Native

Experience

Stanford Sustain Lab 🐙

ASSISTANT RESEARCHER

Stanford, California

Sept 2022 - Dec 2022

- Leading research project, built dataset, and trained CNNs to detect farming activity from satellite imagery
- Collaborating with Ethiopian government to track displacement of people during the Tigray civil war
- Achieved human-level performance, **96% test accuracy** on 3m resolution Planetscope imagery

Grynn

CO-FOUNDER

San Francisco, California

Aug 2021 - Apr 2022

- Built a **decentralized marketplace** to buy and sell **50,000+ drug products** between stores, raising **\$400,000**
- Conducted **80+ research interviews** with store owners and partnered with 6 pharmacies serving **15,000 patients**

Hebbia Inc 🐙

FULL STACK SOFTWARE ENGINEER

San Francisco, California

Jan 2021 - Mar 2021

- Independently built main web application using ReactJS, Antd, PostgreSQL. Powering search over **580K+ documents**
- **Increased search speeds by 50x** by implementing semantic document search using dense vector clustering

Whist 🐙

SOFTWARE ENGINEER INTERN

Boston, Massachusetts

Apr 2020 - Aug 2020

- **Reduced Azure costs \$70,000** by automating resource management for virtual machines, disks, and users
- Revamped the PostgreSQL schema and implemented GraphQL APIs, **cutting query latency by 50%**

Projects

40+ HACKATHONS 🐙

IYK 🐙

Feb 2021 - Aug 2021

- Embedded NFC tags to connect merchandise to Ethereum blockchain for **8000+ users**. Programmed in C, React
- **Raised \$1.2M** from Backend Capital, Lattice Ventures and various angel investors

POLYGON 🐙

Apr 2021

- **Novel video interface** using React and HTML Canvas, running on an automated computer vision and CUDA pipeline
- Collaborated with multiple YouTubers and received **\$50,000** in funding from Backend Capital

ETH DENVER WINNER 🐙

Feb 2020

- Developed a novel fee-less, interest-funded protocol for rentals on Ethereum and IPFS

NOISY 🐙

Jan 2021

- Discord bot that generates music on the fly to over **200k+ users** using the **OpenAI MuseNet** deep neural network

HACK THE NORTH WINNER 🐙

Sep 2018

- Subtitles in AR - used ultrasonic triangulation and real time speech to text to caption people speech

Education

University of Waterloo

BACHELOR OF COMPUTER SCIENCE

4.0 GPA

April 2025 (expected)

Dean's Honor List, Cohort Academic Representative