Terry Su

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Education

Bachelor of Software Engineering - BSE, *University of Waterloo*   2022 – 2027 │ Waterloo, Canada
- Faculty of Mathematics National Scholarship ($15,000)

Skills

Languages: Python, JavaScript, TypeScript, Golang, C, C++, HTML, CSS, Sass, Solidity

Tools/Frameworks: Node.js, React.js, React Native, Nuxt.js, Firebase, SQL, PostgreSQL, MongoDB, gRPC, Flask, Jest, Tensorflow, PyTorch, Heroku, Docker

Professional Experience

Backend Engineer Intern, *Robinhood Markets, Inc.* ⬈   Menlo Park, CA │ Incoming S24

Software Engineer Intern, *Rainmaker (YC W23)* ⬈   New York City, NY │ Incoming W24

Undergraduate Research Assistant, *University of Waterloo* ⬈   Waterloo, ON │ 09/2023-Present
- Working alongside Prof. John Zelek, analyzing ICA methodologies through Canada Compute's **HPC Clusters**.

Software Engineer Intern, *Dandelion Networks* ⬈   Toronto, ON │ 05/2023 - 08/2023
- Fully refactored protocol buffers package using **Golang, Gomega, Gogink**, and **Bash** scripting, sustaining the currency of the blockchain, improving **proto file compilation time** by **~60%**, and test coverage by **~10%**.
- Leveraged the **Cobra Golang CLI** and **gRPC**, to implement the internal **P2P** node state algorithm as a core feature of the **Go SDK** architecture.
- Deployed an essential end-to-end **React Native** NFC card scan flow for digitally storing collectible game cards on **AWS DynamoDB**, impacting **1000+** alpha testers and a **$10M+** liquidity pool.
- Obtained **SSL Certification** through **Certbot** on an **Nginx** server block for a **Docker** instance of **Mautic**, supporting traffic security and integrity.

Computer Vision Developer, *Waterloo Aerial Robotics Group* ⬈   Waterloo, ON │ 09/2022 - 01/2023
- Used Python to integrate **UART protocol** for encoding/decoding byte streams with RFD900x radios as an integral component of the team's flight competition.
- Wrote a script with **pySerial** to raise the radio data intake rate to **115,000+ baud**, increasing the speed by **25%**.
- Used **PyTorch** and CIFAR-10 datasets to improve classification accuracy and validation loss to **84%** and **0.46** respectively on an existing **CNN model**.

Software Engineer Intern, *Hack+* ⬈   Fremont, CA │ 03/2022 - 08/2022
- Built Dash2, a financial management platform, providing service to **730+** student founders at Hack+.
- Created and serviced API routes/endpoints with **Express.js**, **Google Storage**, and **Next.js** to minimize the number of manual receipt uploads and transactions.
- Wrote **DOM** unit tests using **Jest** and dependency mocking to maintain the application's stability.

Projects

GoodEats ⬈
- Developed a hybrid platform **React Native** app using the **Expo** toolchain that allows users to freely explore and tag up to **200,000+** restaurant choices from across the world.
- Facilitated backend end-to-end operations using **Firebase Authentication** and the **Firestore database**.
- Led a team of peers to migrate mock API calls using the **Yelp Fusion API** to access real-time data.

REMAX Real Estate ⬈
- Designed and implemented a full-stack **Next.js/React.js** application to streamline buy/sell operations for **240+** REMAX agents and hundreds of their clients.
- Facilitated the research process of **$1B+** in GTA property listings through an intuitive UI/UX designed on **Figma**.
- Integrated the **Notion** and **Google Maps API** to a **Node.js** server, realizing core endpoint call features.