

Terry Su

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Skills

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

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

Professional Experience

Undergraduate Research Assistant, *University of Waterloo* 📍 Waterloo, ON | 09/2023-Present

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 **DynamoDB**, impacting **1000+** alpha testers and a **\$10M+** liquidity pool.
- Revamped the core website with **Nuxt.js** and integrated **SEO** metric analysis with a deployed **Docker** instance of **Mautic** on **AWS**.

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** to maintain the stability/integrity of the application.

Frontend Developer Intern, *Strive2Thrive Edu* 📍 Charlotte, NC | 01/2022 - 04/2022

- Built and sustained components on the organization's website by using the **WordPress** system and **HTML/CSS/JavaScript**.
- Worked with admin to update the **UI/UX**, improving **traffic optimization** and engaging **400+** site visitors in the relevant programs as global volunteers.

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, enhancing endpoint call features.

Education

Bachelor of Software Engineering - BSE, *University of Waterloo* 2022 – 2027 | Waterloo, Canada

- Faculty of Mathematics National Scholarship (\$15,000)