

# Terry Su

✉ terry.su@uwaterloo.ca

☎ (905) 317-8418

📄 terrysu64.github.io

in terry-su

🌐 terrysu64

## Skills

---

**Languages:** Python, JavaScript, TypeScript, C, C++, HTML, CSS, Sass

**Tools/Frameworks:** Git, Node.js, Postman, Express.js, React.js, Next.js, React Native, Expo, Firebase, PostgreSQL, MongoDB, Flask, Jest, Tensorflow, PyTorch, scikit-learn, Heroku, Netlify, Powershell

## Professional Experience

---

09/2022 – 01/2023  
Waterloo, Canada

**Computer Vision Developer**, *Waterloo Aerial Robotics Group* 📄

- 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**.
- Used **PyTorch** and CIFAR-10 datasets to improve classification accuracy and validation loss to **84%** and **0.46** respectively on an existing **CNN model**.

03/2022 – 08/2022  
Fremont, United States  
(Remote)

**Software Engineer Intern**, *Hack+* 📄

- Built Dash2, a financial management platform for organizations, providing service to **730+** student founders at Hack+.
- Created and integrated 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.

01/2022 – 04/2022  
Charlotte, United States  
(Remote)

**Frontend Developer Intern**, *Strive2Thrive Edu*

- 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.

**The Gamble Bot** 📄

- Utilized **Python3** and the **Discord.py** framework to build a virtual currency to be traded/wagered by guild users.
- Attached functionalities to a **MongoDB** cluster database to update the relevant data of individual entities and sustain **500+** transactions up to date.
- Exposed the application to the Discord community via a hosted **Flask** server.

**SmartBrain** 📄

- Developed a full-stack **React.js** web application that enables users to engage with the **Clarifai Face Detection APIs** and foster competition against one another.
- Used **Express.js/Node.js** alongside **PostgreSQL** to build custom endpoints to accomplish frontend features.
- Deployed the application directly from **GitHub** using the **Heroku CLI**, creating an efficient **CI/CD** pipeline.

## Education

---

2022 – 2027  
Waterloo, Canada

**Bachelor of Software Engineering - BSE**, *University of Waterloo*

- Faculty of Mathematics National Scholarship (\$15,000)
- Relevant Courses: Programming Principles (CS137), Data Abstraction and Implementation (CS138), Method of Software Engineering (SE101)