

Sunny Zuo

✉ me@sunnyzuo.com | 🌐 sunny-zuo | 🔗 sunnyzuo.com | 🌐 sunnyzuo

Skills

Languages: JavaScript, TypeScript, Java, Python, C, C++, ActionScript 3, HTML/CSS

Technologies: Node.js, React/React Native, Angular, MongoDB, Express, socket.io, Flash, Adobe AIR

Experience

ECSSEN Career School

Calgary, AB

SOFTWARE DEVELOPER

Jul 2020 – Nov 2020

- Built and deployed DeFi (decentralized finance) **smart contracts** using **C++** for **EOSIO blockchains**
- Designed and developed a frontend to allow users to interact with smart contracts using **React, eosjs, and scatterjs**

YYC Science Bowl

Calgary, AB

DIRECTOR OF TECHNOLOGY

May 2019 – Aug 2020

- Designed and built a website to reach interested participants, increasing the number of competitors by **over 30%**
- Created custom web-based buzzer solution for competition use using **Angular, Node.js, Express, and socket.io** increasing buzzer accuracy to **100%**

University of Calgary

Calgary, AB

ASSISTANT INSTRUCTOR

Aug 2018, Aug 2019

- Assisted students with designing, building, and debugging software built using **ActionScript 3 and JavaScript**
- Created and taught lesson on building multiplayer games using **websockets**
- Received **100% positive feedback** from instructors and 30+ students

Projects

SmartGarden

sunnyzuo.com/garden

- Created full stack mobile application using **MongoDB, Express, React Native, and Node.js** for smart plant management
- Designed and developed **Android** app UI with **Material Design**, allowing users to view plant health metrics and issue commands
- Utilized serial ports for bidirectional communication between the server and Arduino, allowing commands triggered via a **REST API** to be executed and plant health metrics measured to be aggregated and stored in a **MongoDB** database

Sir Goose Bot

sunnyzuo.com/goose

- Created an authorization layer on Discord using UWaterloo's LDAP, supporting **800+ users** with **Node.js, MongoDB, and Discord.js**

Arbitrage Finder

- Developed tool using **Node.js** that aggregates odds data from a number of sports-betting platforms utilizing **GraphQL APIs, REST APIs**, and web scraping using **Puppeteer**
- Designed algorithm to analyze data and match identical markets and events to find arbitrage opportunities

Cybersecurity CTF Writeups

sunnyzuo.com/ctf-writeups

- Authored writeups for various cybersecurity/infosec **CTF (Capture the Flag)** event challenges
- Solved challenges primarily centered around web exploitation skills such as XSS attacks, SQL Injections, path traversal attacks, and general scripting in **JavaScript and Python**

Awards

Sep 2020 **President's Scholarship of Distinction**

University of Waterloo

Mar 2020 **Think Award and Invitation to World Championship**

Awarded for the most effective and innovative use of programming in provincial championships

VEX Robotics

Education

University of Waterloo

Waterloo, ON

CANDIDATE FOR BACHELOR OF SOFTWARE ENGINEERING (BSE), HONOURS

Sep 2020 – Apr 2025

93.8% GPA, SE Soc Representative