

Yi Xiao (Shawn) Lu

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shawnlu.dev



github.com/chees-e



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Technical Skills

Languages:

- Python
- JavaScript
- Java
- C/C++
- Verilog

Tools:

- Bash
- Quartus
- MongoDB
- MATLAB
- Vim

Experience:

- OpenCV
- MediaPipe
- SoC FPGA
- PennyLane
- AWS EC2

Education

University of British Columbia

Bachelor of Applied Science - Computer Engineering

Graduation: May 2023

Work Experience

Robokids, Coquitlam, BC

August 2020 - Present

Teacher

Guides K-12 students with the interest of robotics, coding, mathematics, or 3D-design to develop their interests and complete projects.

Self-Arranged Tutoring, Coquitlam, BC

September 2018 - August 2020

Tutor

Tutored multiple high school students with Programming, Mathematics, Physics, and Chemistry.

Projects

shawnlu.dev, Personal Project

2023

- Website that displays information about me.
- Created front-end (HTML/CSS) and back-end (express.js).
- Deployed on Firebase Hosting.

Gesture-Controlled Drone, Capstone Project

2021

- DJI Tello drone controlled wirelessly with Huawei's Atlas 200DK board.
- Recognizes body postures with a deep learning model and processes them into commands.
- Implemented PID tracking to keep the user's face centered.
- Added ability to record drone footage and transfer control to another user.

Projects

Flow, School Project

2022

- A JavaScript program analyzer that visualizes function calls using Mermaid diagrams.
- Programs are parsed into Abstract Syntax Tree using espreet.
- Navigated using a graphical user interface made with React.

Bloq, School Project

2022

- Domain-Specific Language created using ANTLR to help game developers to create tiled maps easily.
- Supports multiple features including variables, conditionals, functions, and loops.

Discord bot, Personal Project

2019

- Discord client made with discord.js.
- Has multiple commands including checking stocks, translating messages, searching images.

M68kV6.0 System, School Project

2022

- Motorola 68000 system programmed into De1-SoC's FPGA.
- Programmed features in Quartus including SRAM, DRAM, Cache, SPI Bus & CANBus Controllers.

Android App, School Project

2020

- Messaging App where you can add friends and send messages.
- Worked on both the Frontend and the Backend as well as connecting the two ends.
- Developed a RESTful API for managing and storing user/app data.

Interests

- | | |
|----------------|------------------------|
| • Mathematics | • 3D Design |
| • Puzzles | • Digital Music Making |
| • Snowboarding | • Piano |
| • Badminton | • Game development |