Bradley D. Schmidt

Software Engineering Student

778-586-8196 | bradleyschmidt04@gmail.com | linkedin.com/in/bradleyschmidt04 | github.com/Shup04

Summary

Enthusiastic and **Software Engineering student** with a strong foundation in **programming**, particularly in C++, Python, and JavaScript. Experienced with **microcontrollers**, **Linux**, and **Git**. Looking to apply problem solving skills to make a meaningful difference.

Education

Thompson Rivers University Kamloops, BC, Canada

3rd Year Bachelor of Engineering in Software Engineering (GPA: 3.44)

Skills

Technical Skills

Programming Languages: C++, Python, JavaScript, SQL, VHDL
Developer Tools: Linux, Git, VS Code, Vim, Android Studio, Oracle SQL Developer
AI and ML: Google Gemini AI, OpenAI API
Frameworks: React, React Native, Node.js
Platforms: Firebase, GitHub
Hardware: Arduino, Raspberry Pi, Esp8266, FPGA

Personal Skills

Innovative Problem Solving: Great at identifying unconventional solutions to complex challenges
Analytical Thinking: Strong logical reasoning and ability to break down complex problems systematically
Intellectual Curiosity: Rapid learner who thrives on exploring abstract concepts
Independent: Self-driven and good at finding creative solutions without relying on current methods

Projects

AquaFlora Mobile App | *React Native, Google Gemini AI, Python, Realm Database* Jul. 2023 – Present

- Developed a Mobile app for aquarium management, for users to track water parameters, reminders, and fish stocking.
- Communicated with interested people in order to discover desired features.
- Integrated Google Gemini AI for image recognition (fish, plants, disease detection) and developed and fine tuned a chatbot for aquarium care guidance using Gemini API.
- Created a Python based scraper to pull and verify a database of over 650 freshwater fish species for the app's knowledge base.
- Implemented monthly subscriptions and integrated Google Calendar for intuitive reminders

FPGA Calculator | VDHL, Vivado, ModelSim, Basys 3 FPGA Nov. 2024 – Nov. 2024

- Used Basys 3 FPGA to make a four function calculator.
- Interfaced the FPGA with 4-7 segment display, and PMOD KYPD keypad
- Implemented addition, subtraction, multiplication and division using behavioural modeling in VHDL.
- Completed this with a partner as part of the CENG 3010 Digital Systems Desgn class at TRU.

Gardening Business Website | React, HTML, CSS Aug. 2023 – Sep. 2023

- Worked with business owner to come up with website requirements.
- Worked through design and creation with owner.
- Build a strong foundation of HTML, CSS, and React before working on the AquaFlora mobile app.

URepair | *C++, React, JavaScript* Oct. 2024 – Present

- Developed a web based platform connecting contractors to job opportunities as part of a group project.
- Created backend (C++), and frontend interface (Node.js)
- Worked in a group of three to implement three sorting algorithms, and three data structures to ensure optimal function.

VR Gloves | *ESP8266, Potentiometers, Servo Motors* Jun. 2024

- Assembled a force feedback, hand-tracking glove for VR using open source designs.
- Utilized ESP8266 for wi-fi connectivity and tested with VR integration, gaining experience in hardware to software interaction.

Work Experience

Maintenance Mar. 2020 – Present

Service Canada *Kamloops, BC, Canada*

- Maintained building cleanliness during peak COVID lockdown, demonstrating responsibility and attention to detail.
- Performed tasks such as carpet shampooing, pressure washing, and general upkeep to ensure a safe environment.

Concession Worker Feb. 2023

Senor Froggy *Kamloops, BC, Canada*

- Supported the main cook in a high paced concession environment during peak hockey event hours.
- Worked efficiently as part of a tight knit team under pressure, enhancing teamwork and time management skills.