Zachariah Blair

Phone: 825-712-5401 · Email: zachariah.t.blair@gmail.com · zachariah-blair.netlify.app · Linkedin · GitHub

SOFTWARE AND MECHATRONICS ENGINEERING STUDENT

I am a Software Engineering student currently studying at the University of Calgary. I have a mind for problem solving and a love for invention. As a passionate learner I always strive for understanding rather than just completion, and I believe that quality is the best measure of success in all aspects of life.

SKILLS AND PROFICIENCIES

C/C++	HTML/CSS	Arduino	Leadership	Problem Solving
Python	JavaScript	RISK-V	Teamwork	Critical Thinking
Java	React	Embedded Systems	Communication	Attention to detail

PROJECTS

Custom Shell (built in C)
Worked with a team to build a custom command line shell. We implemented support for command line parameters, the PATH environment variable, command piping and background process execution.

Custom Memory Allocator (C)
Working with the same team, we created a virtual memory allocator that mimicked the functionality of the "malloc()" function as well as provided support for memory freeing and destroying.

Volunteer Scheduling System (Java)
With another team, I lead the production of an application that models the objects, relationships and functionalities of a volunteer organization, and uses algorithmic sorting to create a time efficient schedule.

Notes Web App (React, AWS)
Another student and I created a web application with a highly functional user interface that connects to AWS to store user data, and implements the Google login API to handle privacy. I was mainly involved in frontend.

Sudoku Solver (Java)
I worked on a personal project to create a command-line application that algorithmically solves sudokus.

Various Small Arduino Projects
In my free time, as well as for class projects, I have worked with the Arduino Uno board on many basic applications such as motor and servo control, external chip integration, and ultrasonic distance measurement.

PROFESSIONAL EXPERIENCE

St. Peter's Roman Catholic Church   **August 2017 - Present**
Audio / Visual Technician and Team Lead
Work with live audio mixing systems and video presentation software to live stream services and events such as weddings and funerals. As a head technician, I lead and supervise a group of other employees and volunteers, as well as mentor new team members.

EDUCATION

Bachelor of Science in Software Engineering yr. 3
Minor: Mechatronics
University of Calgary
Dean's List Student | 3.95 GPA last semester

LEADERSHIP EXPERIENCE

- Team Lead as A/V Technician
- Scheduling System Project Leader
- Local Young Men's Community Leader
- Summer Camp Counsellor (Awarded for Excellent Leadership)