

FELIX MA

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Education

University of British Columbia

September 2021 – May 2025

Bachelor of Applied Science in Computer Engineering

Vancouver, BC

- Courses: Computer Hardware, Software Construction, Object Oriented Programming, Data Structures and Algorithms, Mathematical Proofs, Circuit Analysis, Operating Systems

Technical Experience

TochTech Technologies

May 2023 – September 2023

Test Engineer Co-op

Delta, BC

- Designed and conducted 3 trials comparing proprietary sleep-tracking hardware against competitors' devices
- Tested software and wrote Excel spreadsheets to report any bugs found, working closely with developers
- Utilized Jira for tracking and managing testing and development tasks, enhancing team coordination and project management

UBC LaunchPad, Student Design Team

September 2022 – Present

Software Developer

Vancouver, BC

- Aided in the implementation of a React JS application for the team
- Wrote code in GoLang integrating Amazon AWS web-scraping technology into our project
- Organized React JS project files to ensure well-documented and navigable source code

Technical Projects

Clash Course Course Planner | *HTML/CSS, JS, Git/GitHub*

- Developed a full-stack web application to assist in visualizing university course schedules
- Utilized Git/GitHub for collaboration, gaining experience in code sourcing and managing skills
- Designed website layout and UI elements based on data gathered from peers

OS161 Operating System | *C, GDB, SSH, Linux, Git/GitHub*

- Demonstrated proficiency with C data structures and algorithms to write file management and system calls in OS161
- Implemented core subsystems in OS161, including synchronization, process signaling, and memory management
- Leveraged GDB to perform kernel debugging, using GDB functionality to isolate and resolve faults in OS161

Publisher/Subscriber system with Twitter API | *Java, IntelliJ, JUnit, Git/GitHub, Twitter API*

- Implemented Message Queue and Publisher-Subscriber system using Twitter API for data handling and distribution
- Designed scalable architecture to efficiently manage high data volumes, demonstrating skills in system design
- Ensured system reliability and efficiency through comprehensive testing and optimization

N-Gram Search Engine | *Java, IntelliJ, JUnit, Git/GitHub*

- Built core functionalities of a search engine with Java, including auto-completion, sentiment analysis, and data analysis
- Used N-gram models for predictive text completion and efficient search query processing
- Ensured robustness and reliability through extensive unit testing and provided detailed documentation for each module

Other Experience

UBC Geering Up Summer Camps

June 2022 – September 2022

Camps Instructor

Vancouver, BC

- Delivered engaging STEM activities, demonstrating the application of technical knowledge in an educational setting
- Employed clear and concise communication techniques to teach complex concepts to young learners
- Worked collaboratively with instructors and parents to ensure a cohesive and effective educational experience

Skills

Languages: Python, Java, C/C++, HTML/CSS, Javascript, ARM64 Assembly, System Verilog, Bash, GDB

Developer Tools: Git/GitHub, Linux, SSH, Quartus, ModelSim, VS Code, IntelliJ, FPGA, Jupyter Notebook, Jira

Frameworks: React JS, JUnit