

ZANE CRAWFORD

▶ zcrawfor@ualberta.ca

📞 780-222-8288

🌐 Zumzu.dev

EDUCATION:

Bachelors of Computing Science (Software Specialization)

Expected in 2026

University of Alberta

- Computer Architecture (*RISC-V*)
- Programming Methodology (*C*)
- Operating Systems (*C based shells and libraries*)
- Software Engineering I (*Android app development in Java*)
- Machine Learning I & II (*Python / Julia in Jupyter notebooks*)
- Python I & II
- Strong knowledge of GitHub

PROJECTS:

QR Event Manager (*Group project for Software Engineering I*)

2024

- Worked in a SCRUM-style team with 6 students, with weekly sprints
- Implemented features like geolocation, mapping, and content moderation
- Adapted to changing project requirements and workload

Temperature Regulator for 3D Printer (*Personal project*)

2024

- Built an Arduino circuit with several sensors and an old 120mm computer fan
- Wrote code to intelligently modify fan speed to hold a target temperature
- Allows for materials that require higher ambient temperatures (ABS, ASA, PA)

Balancing Engine (*Personal project for TTRPG group*)

2023

- Ran mass simulation of Cyberpunk 2020 combats to better balance items
- Visually graphed power to prove the validity to changes made
- Dramatically improved the variety of viable builds available in the system

A more complete project list is available [on my portfolio](#)

SKILLS:

- **General Programming Languages:** Python, Java, Javascript, C/C++, C#, SQLite, Bash
- **Web Development:** HTML, CSS, Javascript
- **Assembly Language:** RISC-V, x86
- **Functional Programming:** Prolog, Lisp, λ -Calculus
- **Source and Version Control:** Github
- **Game Development:** Unity C#
- **CAD Modeling:** Fusion 360
- **Linux Environments:** Ubuntu, Debian, Alpine, Kali
- Performance Evaluation and Optimization
- Functional and Object-Oriented Programming
- Strong Communication and Interpersonal Skills
- Self-Motivated Learning

WORK EXPERIENCE:

CODING INSTRUCTOR

Mar 2023 - Present

Code Ninjas Summerside

- Delivering one-on-one instruction in a range of STEM skills, including 3D modeling and game development using MakeCode, Scratch, Javascript, Lua, and Unity C#
- Creating a welcoming and safe atmosphere for kids aged 7-14
- Maintaining an organized and productive classroom environment
- Working with students to troubleshoot various tech problems as they arise

RANGE MANAGER

May 2024 - Aug 2024

Edmonton Gun Club

- Working alongside the board members and one other employee to handle the ranges daily operation, from customer service to machine and system maintenance
- Opening and closing the range each day
- Running POS, and creating accurate daily float reports
- Acting as an effective range safety officer for new shooters
- Handling most customer interactions, in-person and by phone about policy, hours, and pricing

SKI INSTRUCTOR

2017 - 2023

Rabbit Hill - Winter Ski Season

Seasonal Nov-Mar

- Consistently providing a positive and successful ski lesson experience for children and adults
- Evaluating and documenting student progress and concerns
- Participating in regular on-hill technical and customer service training
- Implementing the help of apprentice ski instructors within lessons
- Maintaining proficiency in first responder skills such as First Aid and CPR to offer individuals in distress support if needed

A more complete work record is available [on my LinkedIn](#)