# **ZANE CRAWFORD**

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### **EDUCATION:**

Bachelors of Computing Science (Software Specialization)
University of Alberta

CompTIA Security+ ce Certification
SY0-701

Expected in 2027
2025

## **PROJECTS:**

QR Event Manager (Group project for Software Engineering I - Java)
 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 - C++)

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 - Python)

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

- 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 <u>on my LinkedIn</u>

Seasonal Nov-Mar