

Aayush Karki

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 aayushkarki05 |  akarki2005

SUMMARY

Motivated and driven undergraduate computer science student seeking an internship in software development. Proficient in the principles of object-oriented design, design patterns and the software development life cycle, as demonstrated through coursework and prior experience with individual and collaborative software projects.

SKILLS

- **Technical Skills:** C, Python, Java, HTML/CSS, Javascript, ReactJS, Git/Github, Data Structures & Algorithms
- **Soft Skills:** Work Ethic, Attention to Detail, Problem-Solving, Self-Starting, Leadership, Communication

EDUCATION

- **University of Toronto** September 2023 - Present
BSc Computer Science Toronto, Ontario
 - GPA: 3.96 / 4.00
 - Relevant Courses: Software Design, Data Structures and Algorithm Analysis, Calculus with Proofs, Multivariable Calculus, Linear Algebra I/II, Probability/Stats/Data Analysis I/II, Software Tools and Systems Programming

PROJECTS

- **Farmsburner [Video Game]** October 2024 - December 2024
Tools: Java, Git/Github, OpenWeatherMap API
 - Developed a farming simulation game that incorporates real-world weather data into gameplay, utilizing the Java language for backend game logic, and Java Swing for the frontend GUI
 - Leveraged the OpenWeatherMap API to access weather data for a user-selected game location, in order to retrieve both current conditions as well as a 5-day forecast
 - Built a scalable and modular product through the application of the SOLID principles of object-oriented design
 - Applied the singleton, builder, and factory design patterns to various game entities
 - Partnered with 3 other developers, employing Git & Github to facilitate a seamless software development process
- **Barn Burner [Video Game]** July 2024 - Present
Tools: Godot, GDScript, Git/Github
 - Independently developed a 2d multiplayer air hockey game in the Godot game engine using GDScript
 - Harnessed the Godot physics engine to implement player and puck movement algorithms and behavior
 - Employed object-oriented design principles such as single responsibility within game scenes, ensuring low coupling and high cohesion of individual game modules

EXPERIENCE

- **The C.O.D.E. Initiative Foundation** September 2024 - Present
Volunteer Tutor Remote
 - Empower youth to discover their passion for computer science through online tutoring for introductory Python, Software Design and Artificial Intelligence courses
 - Mentor youth as they progress through coding modules and challenges, providing encouragement and positive reinforcement as setbacks and difficulties arise
- **Calaway Park** May 2023 - August 2024
Senior Game Operator Calgary, Alberta
 - Efficiently multitasked to provide excellent guest service, process monetary transactions, maintain cleanliness, operate carnival games and manage inventory in a fast-paced amusement park environment
 - Coached 50+ new team members in a leadership role within the games department, leading by example and communicating effectively to ensure company standards were met by team members
- **Calgary Public Library** September 2022 - June 2023
Youth Volunteer - Code Club and Math Quest Calgary, Alberta
 - Tutored one-on-one with youth aged 10-12 as part of the Code Club program, guiding mentees through the fundamentals of computer programming using programs such as Scratch and CodeCombat
 - Empowered youth to discover their passion for mathematics through the Math Quest program, leading interactive games and activities designed to enhance youth numeracy skills