

Omar Khan

Student, Developer and Researcher

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Calgary, AB

EDUCATION

BSc Honours in Computer Science ◦ CGPA: 3.85 / 4 [University of Calgary](#) | [Calgary, AB](#) | [Sep 2021 – Apr 2025](#)

Awards and honors: Faculty of Science Dean's List, NSERC USRA, Jason Lang Scholarship, Alexander Rutherford Scholarship

Some relevant courses: Data Structures, Algorithms, and their Analysis • Theoretical Computer Science • Computing Machinery • Software Engineering • Information Security • Reverse Engineering • Linear Algebra • Calculus

EXPERIENCE

Undergraduate Researcher (Part-Time) [University of Calgary](#) | [Calgary, AB](#) | [Jan 2023 – Present](#)

- Research in digital twins, AR/VR and human-computer-interaction the HXI lab under supervision of Dr. Kangsoo Kim.
- Developed a web-app using ASP.NET, C# and JavaScript for the purpose of streamlining hazard inspections.
- Received the NSERC USRA award (\$7500) to fund the development of an AI virtual campus guide in the Unity game engine.

SKILLS

Programming C#, Java, JavaScript, Kotlin, Python, Web development (HTML+CSS), ARM64 Assembly

Technologies Unity3D, React, ASP.NET MVC, Tailwind, Jetpack Compose, JavaFX, BeautifulSoup4, JUnit

Languages English, Urdu, French

PROJECTS

Calgary Drone Simulator ◦ Game ◦ Independent ◦ [View on GitHub](#) [Oct 2022](#)

- Developed a drone simulator set in a model of downtown Calgary that I built in Blender using real-world satellite data.
- Wrote C# scripts for handling drone physics and controls and other game interactions in the Unity game engine.

POWER THRU ◦ Web app ◦ Collaborative (3) ◦ [View on GitHub](#) [Hack the Change](#) | [Nov 2022](#)

- Collaborated in a group of three to build a 3D React app that aims to support those struggling with addiction.
- Designed and developed the 2D part of the UI and the app logic using JavaScript, React, and Tailwind CSS.

Calgary Connect ◦ Web / Android app ◦ Collaborative (9) ◦ [View on GitHub](#) [YYC Hacks](#) | [July 2022](#)

- Built an application in a group of nine to inform tourists on events and attractions in downtown Calgary.
- Developed an Android component with Kotlin and Jetpack Compose, connected it to an events API and Google Maps.

Music Discovery App ◦ Android app ◦ Independent ◦ [View on GitHub](#) [June 2022](#)

- Developed 'Discover Electronic', an app to introduce users to electronic music and give them tailored recommendations.
- Designed a user interface and built it using the Jetpack Compose framework for Kotlin.

Prayer Time Retriever ◦ Desktop app ◦ Independent ◦ [View on GitHub](#) [May 2022](#)

- Built an Islamic prayer time retriever using Python to allow users to easily find prayer times for their location.
- Implemented a webscraping algorithm using the BeautifulSoup4 library to retrieve prayer times for any city in the world.

2-Player Snake Game ◦ Web game ◦ Independent ◦ [View on GitHub](#) [Aug 2022](#)

- Re-created the snake game with a local multiplayer twist using JavaScript and CSS.