Omar Khan

Student, Developer and Researcher

<u>Website</u> <u>GitHub</u> <u>LinkedIn</u> <u>oakhan.03@gmail.com</u> (587) 707 1792 Calgary, AB

EDUCATION

BSc Honours in Computer Science OCGPA: 3.85 / 4 University of Calgary | Calgary, AB | Sep 2021 - Apr 2025

Awards and honors: Faculty of Science Dean's List, 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.

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, Hindi (limited), Urdu (limited), French (limited)

PROJECTS

Calgary Drone Simulator ○ Game ○ Independent ○ <u>View on GitHub</u>

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) ○ <u>View on GitHub</u>

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 o Android app o Independent o <u>View on GitHub</u>

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 ○ <u>View on GitHub</u>

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 • <u>View on GitHub</u>

Aug 2022

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