# Zain Khan

# kn.zain@hotmail.com | linkedin.com/in/zain-khan | github.com/7kzaincode

#### EDUCATION

# University of Waterloo

Waterloo, ON

Bachelor of Applied Science in Computer Engineering

Sept. 2025 - Apr. 2030 (Expected)

### EXPERIENCE

#### Frontend Developer

Jun. 2023 - Present

Kasperia

Vancouver, BC

- Designed and deployed kasperia.ca using HTML, CSS, and JavaScript, optimizing UI for responsiveness and performance.
- Implemented reusable components and clean code structure to enable long-term scalability and maintainability.

# Data Analytics & Dashboard Developer

Sep. 2023 – Present

Kasperia

Remote

- Built automated data pipelines with JavaScript event tracking, SQL, and APIs to capture website user behavior.
- Delivered interactive dashboards with Looker Studio / React + Chart.js to track engagement (clickstream, conversions, session time).
- Enabled data-driven decision making by providing real-time insights into customer interactions.

#### Projects

#### Arcade Project | Raspberry Pi, Hardware Assembly, Python, JavaScript

Dec. 2023 – Present

- Designed and built a fully functional retro gaming arcade system integrating Raspberry Pi, joysticks, speakers, and 1,000+ games.
- Led hardware assembly and software configuration, while producing documentation to support long-term maintainability.
- Repurposed as a sustainable fundraising initiative, generating ongoing support for coding-related activities.

#### Flappy Bird Replica (Immy Bird) | Firebase, JavaScript, HTML/CSS

- Developed an interactive web game with a custom login system and real-time leaderboard using Firebase.
- Implemented cookies for session management and dynamic leaderboard updates, improving user experience.

## Caesar Cipher Tool | Python, Cryptography

- Built an encryption/decryption tool using Python dictionaries to implement the Caesar cipher.
- Demonstrated algorithmic problem-solving and applied fundamental cryptographic principles.

#### Leadership & Volunteering

#### Code Ninjas (Volunteer Staff)

Jul. 2024

• Taught coding to children (ages 5–14) using Microsoft MakeCode and JavaScript, promoting collaboration.

## Terry Fox Foundation (Volunteer)

2021 - 2024

• Assisted with route coordination and participant support during charity runs, contributing to event logistics.

# TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C, HTML/CSS

Web Development: Responsive design, UI optimization, Firebase integration

**Databases**: SQL, Firebase (real-time database, authentication) **Design**: CAD & 3D modeling (Fusion 360, Blender, AutoCAD)

Hardware: Raspberry Pi prototyping, embedded systems, hardware assembly

Automation: Excel VBA scripting, process automation Frameworks/Tools: React, Node.js, Git, Chart.js