ZAIN AFZAL

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EXPERIENCE

Front-End Developer   July-August 2019
Net Zero Energy Inc. | Toronto,ON

- Developed landing page for start-up company, utilized **HTML**, **JavaScript**, **CSS**, and **React** framework for frontend to generate modern and clean UI
- Designed and created the Homepage, About us, Services, and Projects/Featured Projects pages
- Increased how much monthly projects the company gained by around 30%

Energy Modeller   January – September 2018
Advanced Building Solutions Inc. | Toronto, ON

- Performed detailed energy modelling, evaluation of complex building systems, and life-cycle-cost analysis on prestigious municipal projects, using in depth knowledge of simulation software's such as **eQUEST** and **EE4**.
- Project examples include Monaco (263 Hurontario Street), Upper Vista (7711 Green Vista Gate), East Junction (394 Symington Avenue)
- Gained strong **Auto CAD** and **Excel** skills by drawing complex zoning floorplans and performing excel take-off for different zones and heating/cooling systems for various projects

PROJECTS

Portfolio Website
JavaScript/TypeScript, HTML, CSS, Angular

- Created website to display my experiences, projects, and skills
- Utilized various animations such as fading, sliding, and zooming in and out from AOS library
- Displayed moving fog animation on landing page by implementing Vanta.js library

Connect Four
Android Studio/Java

- Used Android Studio and Java to develop a Connect Four game
- Includes clean user interface and multiple animations (i.e., dropping a piece, flashing pieces to show four connected)
- Efficiently coded an algorithm to determine when the user the wins

Street Fighter
Java/GUI

- Constructed main menu and the arcade game "Street Brawler" where user can select various maps to fight one on one
- Broadened overall Java application skills through making an interactive GUI and by using various types of animations.

Hovercraft
Arduino/C

- Created and designed hovercraft from scratch using three powerful brush-less motors, an Arduino Board, and various materials to build the base frame
- Installed two servo motors to control flaps for navigation which were in turn controlled by a custom-built controller

EDUCATION

University of Waterloo | Bachelor of Applied Science in Software Engineering   Expected September 2025

- **Relevant Courses**: Programming Principles, Intro to Data Abstraction and Implementation
- **Awards:** President's Scholarship of Distinction

SKILLS

Languages: Java, Python, C++, C, C#, JavaScript/TypeScript, HTML, CSS

Other: Angular, React, SQL, Node.js, Android Studio, Git, UNIX, Arduino, AutoCAD