# Adeel Akhani

Personal Portfolio | in adeelakhani | 🗘 adeelakhani | 🔼 aakhani@uwaterloo.ca

## **EDUCATION**

### University of Waterloo

Bachelor of Software Engineering

Present

#### TECHNICAL SKILLS

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

Concepts: RESTful API Design, Object-Oriented Programming, Data Structures & Algorithms

Technologies: AWS, MongoDB, PostgreSQL, Vercel, Render, Unity Game Development

Libraries & Frameworks: Next.js, React, Tailwind CSS, Node.js, Express.js, Mongoose, EJS, Scikit-learn, Pandas,

NumPy, Matplotlib, Java Swing, Java AWT **Tools**: Git, Github, GitLab, Postman, Unix

#### EXPERIENCE

# Software Engineering Intern

Jul 2022 - Aug 2022

 $SoftSages\ Technology$ 

- Created a linear regression model achieving a 94% accuracy using pandas, NumPy, & scikit-learn to predict house prices based on the size of the house as well as different facilities included
- Developed a **logistic regression model** with a **93% accuracy** using scikit-learn to predict the future of an employee at their workplace based on human resources data
- Made a email spam detection model based on spam and ham email data using scikit-learn, applying a **TfidfVectorizer** to preprocess the data, and achieved a **90% accuracy**

## Computer Science Teaching Assistant

Feb 2023 – Jun 2023

Teaching Assistant

- Worked as a Java programming teaching assistant for 2 classes with 60+ students in a secondary school
- Taught and explained various Java programming concepts ranging from **basic printing** to **arrays**, to **object oriented programming** resulting in a overall higher classroom average
- Graded student homework daily, providing feedback on writing efficient, and cleaner code

#### Projects

LooLines | Next.js, Tailwind CSS, Supabase, PostgreSQL, TypeScript, Bleak, Vercel

Sep 2024 – Dec 2024

- Web application allowing students to see the number of people in line at U of Waterloo's busiest Tim Hortons
- Estimated room population from device Bluetooth RSSI data using Bleak, achieving a 89% accuracy
- Constructed an appealing frontend with Next.js, Tailwind CSS and MappedIn SDK for map interface
- Utilized a **Supabase** backend for real-time information

MakeSomething | React, Node.js, Express, Vercel, Render, Claude AI API, Axios

Jan 2025

- Full-stack web application for generating recipes based on available ingredients reaching 30+ users
- Created a RESTful API with Node.js and Express to process data and generate recipes using Claude API
- Engineered a dynamic frontend with **React** and **Vite**, featuring real-time ingredient recommendations
- Deployed on Vercel with backend hosted on Render

#### RememberGranny | HTML, CSS, Groq API, LSTM

Oct 2024

- Web application for elderly users that provides password protection tools and story-based memory assistance
- Built a password strength classification using a LSTM model trained on a dataset with 760,000 passwords
- Implemented story generation based on the users password to help them remember it using Groq API
- Password generation using Groq API based on a personal questionnaire, allowing for the elderly to easily make strong passwords
- Achieved a effective and simple frontend using HTML and CSS and Flask backend for API calls

Game Development Portfolio | Unity, C#, Java, Java Swing, Java AWT

2021 - 2023

- Made a full Monopoly Express clone using Java for backend and Java Swing and Java AWT for frontend
- Designed narrative-driven game based on *Grendel* by John Gardner, implementing key plot elements using **Unity**
- Designed a stickman platformer with rag-doll physics where you avoid the lava and enemies using Unity