Adeel Akhani

Personal Portfolio | in adeelakhani | ♠ adeelakhani | ► aakhani@uwaterloo.ca

EDUCATION

University of Waterloo

Bachelor of Software Engineering

TECHNICAL SKILLS

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

Technologies: REST APIs, Vercel, AWS, MongoDB, PostgreSQL, 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

Expected Graduation: April 2029

SoftSages Technology

- Created a **linear regression model** using **scikit-learn** to predict house prices based on the size of the house as well as different facilities included
- Developed a **logistic regression model** using scikit-learn to predict the future of an employee at their workplace based on human resources data
- Created an email spam detection system 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 teaching assistant in a secondary school Java programming classroom
- 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 and occasionally taught full lessons
- Assisted in designing assignments to push out-of-the-box thinking and challenges for student improvement

Projects

LooLines | Next.js, Tailwind CSS, Supabase, PostgreSQL, TypeScript, Bleak, MappedIn SDK Sep 2024 - Dec 2024

- Web application allowing students to see the number of people in line at U of Waterloo's busiest Tim Hortons
- Calculated the distances between people's devices and our server from RSSI data using Bleak, and grouped devices based on a certain threshold achieving 89% accuracy
- Used **Next.js** and **Tailwind CSS** to design the website and used **Supabase** for the backend allowing for a appealing website that displays real-time information
- Implemented interactive map interface using MappedIn SDK for location visualization

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

Jan 2025

- Developed a full-stack web application for generating recipes based on available ingredients
- Created a RESTful API with Node.js and Express to process data and generate recipes using Claude API
- Implemented dynamic frontend with **React** and **Vite**, featuring real-time ingredient recommendations

RememberGranny | HTML, CSS, Groq API, LSTM

Oct 2024

- Web application for elderly users that provides password protection tools and story-based memory assistance
- Implemented 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
- 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
- Created 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