

Adeel Akhani

🌐 [Personal Portfolio](#) | [in adeelakhani](#) | [adeelakhani](#) | ✉ aakhani@uwaterloo.ca

EDUCATION

University of Waterloo

Bachelor of Software Engineering

Expected Graduation: April 2029

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, 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** 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**