

Akshar Barot

☎ 314-760-8149 | ✉ akshar.barot67@gmail.com | 🌐 aksharbarot.com | 🌐 aksharbarot | 📷 notAkki

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Software Engineering, Honors

2023 - Present

- Cumulative GPA: **90.86%**
- Relevant Coursework: Programming Principles (**97%**), Intro to Methods of Software Engineering (**90%**), Linear Algebra (**95%**), Intro to Data Abstraction and Implementation (**90%**)

SKILLS

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

Libraries: Next.js, React, Flask, Tailwind CSS, Node.js, Express.js, OpenCV, Mediapipe, Mapbox, Three.js

Developer Tools: Firebase, MongoDB, WebSockets, Figma, Jupyter Notebook, UNIX, Git, Powershell

EXPERIENCE

Lead Frontend Developer | Next.js, TypeScript, Tailwind, shadcn, HTML/CSS

Feb. 2024 - Present

Wat Street

Waterloo, ON

- Designed and led the development of the [club site](#), optimizing performance and achieving **100%** on Lighthouse
- Architected an algorithmic trading backtesting application, integrating stock and crypto market data APIs
- Built a statically served research page for club members' papers, implementing tag-based toggle filtering

Operations Technology Specialist | Tailwind, HTML/CSS

May 2024 - Present

Brew Bites

St. Louis, MO

- Designed and launched a website with **SEO optimization**, increasing web traffic and online inquiries by **85%**
- Developed an interactive digital menu system, reducing manual updates by **2 hours** weekly
- Led networking efforts with local organizations to secure catering contracts, driving a **300% revenue increase**
- Created graphic designs for signage, flyers, and marketing, enhancing brand identity and community engagement

Project Team Member, Microsoft Azure & AI

May. 2024 - Aug. 2024

Waterloo Experience Accelerate Program

Waterloo, ON

- Designed an AI financial advisor with **Microsoft Azure and AI**, including custom models for personalized advice
- Researched key financial investing principles to ensure accurate and reliable investment recommendations
- Collaborated with a multidisciplinary team to design a pipeline and deliver a proposal for a market-ready solution

PROJECTS

Spots 📍 - Classroom Availability Map (**10000+ users within 5 days**) | Next.js, Flask, Python, Mapbox, REST API

- Developed a full-stack app to help students find open classrooms using real-time geolocation and university data
- Optimized data fetching using a custom **Flask API** to retrieve and process data, **reducing load times by 30%**
- Implemented a **Next.js** frontend with dynamic maps and markers through **Mapbox** to optimize user experience

Jarvis 📍 - Featured on OpenCV Live | Next.js, TypeScript, Python, Flask, OpenCV, Mediapipe, Three.js

- Built an interactive, gesture-controlled 3D hologram environment using computer vision technology
- Integrated hand tracking, depth sensing, gesture recognition, and voice commands with the **Web Speech API**
- Rendered 3D models with **Three.js** and **Next.js** with **Typescript**, using **WebSockets** for real-time updates

BASIC Web 📍 - BASIC Compiler for Web Dev (**UofT Hacks '24 Winner**) | TypeScript, JavaScript, HTML/CSS

- Designed an imperative programming language while considering grammar sets and syntactical features
- Built a compiler in **TypeScript** using recursive parsing to construct an abstract syntax tree
- Interpreted code using a runtime library to bundle program to a single **HTML** file

Portfolio + Blog 📍 | Next.js, TypeScript, JavaScript, Tailwind CSS, HTML/CSS

- Implemented static site generation for Markdown blog posts resulting in **1.8x** faster loading times
- Designed a sleek, responsive UI using **Tailwind CSS** by considering breakpoints for cross-platform capability