AIDEN SUH

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EDUCATION

University of Waterloo

September 2024 - April 2029

Bachelor of Computer Science and Finance (BCFM)

Waterloo, ON

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, HTML5, CSS3, SQL, Kotlin

Frameworks/Libraries: React, Vue.js, Node.js, Next.js, Express.js, Three.js, Tailwind CSS, Flask, PyTorch, NumPy, pandas **Software/IT Tools**: VS Code, Jupyter Notebook, Git, GitHub, Docker, MySQL, PostgreSQL, Supabase, SQLite, Nginx, Figma

EXPERIENCE

Software Developer

January 2025 – April 2025

Waterloo, ON

University of Waterloo Korean Association

waterioo, ON

- Developed a full-stack web app using Python, Flask, and SQLite to manage membership registrations for 200+ members
- Upgraded a student-vendor verification system using **JavaScript**, **HTML**, and **CSS** to secure member authentication for exclusive discount services at **5+** partner eateries and improve operational efficiency by **50%** from the previous system
- Conducted user acceptance testing (UAT) to meet business requirements, achieving **100%** approval from **20+** club execs
- Performed system integration analysis to implement load balancing via DigitalOcean, ensuring 99.99% peak uptime

Web Developer

January 2025 – March 2025

Electrium Mobility

Waterloo, ON

- Engineered a high-performance documentation website using **Docusaurus** as a lightweight content management systems (CMS) alternative, achieving a **99%** Lighthouse performance score while strengthening security and scalability
- Designed the responsive web interface using **HTML**, **TypeScript**, **React**, and **Tailwind CSS**, achieving a **92%** Lighthouse accessibility score through optimized front-end code structure and strict adherence to web accessibility best practices
- Programmed a Kotlin-based Android app for IoT development boards using Google Maps Platform API, delivering real-time GPS services for E-bike users; also incorporated a Bluetooth Low Energy scanner to troubleshoot **10+** device connections

Data Hackathon Coordinator

December 2024 – February 2025

University of Waterloo Data Science Club

Waterloo, ON

- Created professional opening and closing ceremony presentations using **PowerPoint** and **Canva**, engaging **350+** participants at Canada's largest data science hackathon, organized in collaboration with an executive team of **12** members
- Managed 20+ contributors to deliver 7 data analysis workshops, achieving a 233% year-over-year offering growth

PROJECTS

RBVeal | JavaScript, React, Next.js, Tailwind CSS, Node.js, Express.js

- Won RBC's 1st Place Sponsor Prize (\$1000 CAD) among 550+ competitors at the University of Toronto's 2025 Hackathon
- Built a phishing simulator with dynamic emails via Nodemailer, banking UIs remade with React, and GPT-40 call-agent
- Integrated a text-to-speech (TTS) synthesis for real-time AI call agent using **OpenAI**, **WebSockets**, **Twilio**, and **Deepgram**, utilizing TTS APIs to generate natural-sounding, **<2s** latency voice responses and improve phishing scenario authenticity

EchoDoc | TypeScript, React, Next.js, Tailwind CSS, Node.js, Express.js

- Implemented a full-stack platform using ElevenLabs API to automate patient management workflows with voice cloning
- Blended an Al-driven scheduling system using Google Gemini API to book appointments based on real-time availability
- Devised a secure database using **Supabase** with **Clerk** authentication, managing **50+** patient profiles and appointments

OutPerform | Python, NumPy, pandas, Matplotlib, yfinance

- Constructed a data optimization model to elevate stock portfolio returns, exceeding the TSX 60 and S&P 500 benchmarks
- Outlined a data preprocessing pipeline, applied 3+ portfolio performance metrics, and visualized results using Matplotlib
- Utilized NumPy and pandas for vectorized simulation of 1M+ portfolios for 40+ stocks with an execution runtime of <25s

Personal Portfolio | TypeScript, React, Next.js, Three.js, Tailwind CSS

- Crafted a 3D dynamic portfolio using Next. js App Router and Three. js, accomplishing a 100% Lighthouse SEO score
- Optimized email workflow with Resend API and robust error handling, achieving a 96% Lighthouse Best Practices score
- Assembled a mobile-responsive UI using Tailwind CSS and Framer Motion to enhance animations and user experience