

# ZAYN ABED

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Software Engineering student with 20 months of internship experience, Google Developer Group Lead, and AWS Certified Cloud Practitioner. Passionate about building intuitive user interfaces and shipping high-performance web applications

## EDUCATION

**McMaster University** Sep. 2020 – Apr. 2025 (Expected)  
*Bachelor of Engineering, Software Engineering - GPA: 3.9* Hamilton, ON  
**Relevant Coursework:** Data Structures and Algorithms, Advanced Databases, Concurrency and Multi-threading, Machine Learning, Computer Networks and Security

## TECHNICAL SKILLS

**Languages:** TypeScript, JavaScript, Python, Golang, Java, SQL, HTML/CSS  
**Frameworks & Libraries:** React.js, Next.js, Tailwind CSS, SCSS, Jest, Cypress, React Query, Redux, Express.js, FastAPI  
**Tools:** Git, Docker, Kubernetes, PostgreSQL, MongoDB, MySQL, AWS, Google Cloud Platform, Terraform, Supabase, Postman  
**Certifications:** AWS Certified Cloud Practitioner

## PROFESSIONAL EXPERIENCE

**Doctalk** (Startup building software solutions for doctors) May 2024 – Aug. 2024  
*Full-Stack Developer Intern* Toronto, ON

- Led the end-to-end development of an internal email builder, handling requirements elicitation, system design, and deployment. Replaced third-party vendors, reducing tool costs by **14%** and improving email delivery for **900+** users
- Built the drag-and-drop email builder using **React.js**, **Next.js**, **TypeScript**, **Tailwind CSS**, and **PostgreSQL**, ensuring scalability and seamless integration with existing infrastructure
- Designed and developed the company landing page based on **Figma** product mockups using **React.js**, **Next.js**, and **Tailwind CSS**, ensuring an intuitive and responsive user experience aligned with brand identity
- Enabled the product team to efficiently generate and release notifications independently, removing the need for a dedicated developer, by designing and integrating a visual notifications workflow builder using **React Flow** and **Node.js webhooks**

**COLTENE SciCan** (Global leader in IoT medical sterilization equipment) Jun. 2022 – Aug. 2023  
*Software Engineering Intern* Toronto, ON

- Resolved **700+** tickets for a medical device IoT data dashboard, including feature development, debugging, and executing integration and unit testing with **React.js**, **JavaScript**, **SCSS**, and **Jest**
- Reduced testing overhead by **5** hours weekly by developing a **Terraform** infrastructure pipeline, which automated the deployment of **Node.js** and **TypeScript** scripts to **AWS Canaries** for efficient execution of end-to-end and integration tests
- Refactored and redesigned a promotional campaign platform, increasing submissions by **430%** QoQ by developing scalable, high-performance web pages with **Hugo**, **JavaScript**, and **SCSS**

## EXTRACURRICULAR

**Google Developer Group** Jun. 2024 – Current  
*Open-Source Core Team Lead* Hamilton, ON

- Managing a team of **10** developers, defining project requirements, setting development milestones, and ensuring the successful deployment of an AI-assisted journaling and mood-tracking application focused on mental health
- Leveraging **React.js**, **JavaScript**, **Tailwind CSS**, **Express.js**, and **MySQL** to build the application efficiently, incorporating **GCP Vertex AI** and **Gemini** to enhance mood analysis and user interaction capabilities

*Open-Source Core Team Developer* Sep. 2023 – May 2024

- Developed an automated machine learning service, utilizing **React.js**, **Material UI**, **FastAPI**, and **Google Cloud Platform** to facilitate accessibility for users with diverse technical backgrounds
- Automated the upload of **Docker** images to **GCP Artifact Registry** using **Terraform** and **GitHub Actions**, then deploying on **Google Kubernetes Engine** for a scalable and efficient pipeline infrastructure

## PERSONAL PROJECTS – [VIEW PORTFOLIO](#)

**BravoDispatch**  Nov. 2024

- Won **"First Place Overall"** and **"Best Use of AI with Cloudflare"** at Hack Western 11 (189 participants) by developing a computer-aided dispatch (CAD) application that leverages AI to prioritize emergency calls and assist dispatchers in real time
- Built with **Next.js** and **Supabase**, the app integrates speech-to-text transcription with **Llama 3** AI via **Cloudflare** workers to extract critical insights from live transcripts, automate case categorization, and enhance dispatcher efficiency