

"I am currently looking for a 12-month full-time internship position starting in September 2024 as part of my school's internship program, after which I will return to school for my last year of studies. I am someone who loves to learn, and I would like a position that supports that goal, and where I can also contribute my existing skills and knowledge to the team. I always prioritize staying at the forefront of new technologies, adapting my process to be more efficient by using tools such as GitHub Copilot and ChatGPT for debugging. I am particularly passionate about projects that bridge the gap between hardware and software, such as robotics or programming physical systems!"

Education

3rd year @ Queen's University (B.A.Sc. in Computer Engineering, Innovation Stream)

Kingston, Ontario

2021 - Present

GPA: 4.16/4.3 (Dean's Scholar)

- The Innovation stream allows me to combine engineering with courses in entrepreneurship and running my own business
- I also enjoy courses in Data Structures & Algorithms, Object-Oriented Programming, Digital Logic, and Operating Systems
- I have received Dean Scholars Distinction every semester and received the Ontario Professional Engineers Foundation Scholarship

Technical Skills

I have over **7 years** of **JavaScript** experience, originally self-taught, using **NodeJS** for backends and **ReactJS + TypeScript** for frontends. I have over **5 years** of **HTML/CSS** experience, also self-taught. I have about **3 years** of mobile development experience using technologies like **Flutter and React Native**. I have used **Java and C** over the past **3 years** in coursework. I have **3 years** of experience working with several backend technologies including **Firebase, MongoDB, PostgreSQL and AWS**. I am currently learning **Python and MatLab**. Despite my range of skills, I know these are just the beginning, and I am always looking to learn more!

Experience

I am currently pursuing my degree at Queen's University full-time while simultaneously working part-time as a Tech Lead at Nutripair and as Director of IT for the Engineering Society. My full work experience can be seen at linkedin.com/in/joshwfriedman.



Nutripair

Founding Full Stack Tech Lead

California (Remote)

August 2023 - Present

Nutripair is a ~10 person startup that helps people find the best foods for their dietary preferences at restaurants near them, while also helping local restaurants increase revenue and attract more diverse customers. I joined as an intern and have grown to become the Full Stack Tech Lead of the company, while continuing my full-time studies at Queen's University.

- **Worked with the CEO** and other upper management to discuss the company's needs concerning DevOps, including automation, documentation, and CI/CD and created a DevOps plan that I executed with my team of interns
- **Created a product roadmap** with the other tech leads and CEO to keep the team on track for launch, as well as long-term goals post-launch
- Implemented a CI/CD pipeline using GitHub Actions to fully automate the testing and building process of the app, **decreasing build times from a day to under a minute**, allowing the team to focus their time more on development and pushing the company forward
- **Guided my team of interns** focused on implementing automated tests for frontend and backend using Jest, ensuring reliability within the app
- **Documented the various processes and systems** in place throughout our tech stack, from development guidelines to testing and deployment, easing the onboarding process of new interns to ensure the company can withstand turnover

Software Engineering Intern (Full Stack)

April 2023 - August 2023

- Implemented and tested user authentication using Amazon Cognito to authenticate with the rest of the AWS suite, **increasing security within the app**, which allowed the company to apply for several partnerships that needed specific security standards
- Improved security measures by **implementing multi-factor authentication and federated sign-in** with Google, Apple, and Facebook, increasing the credibility and ease-of-access of the application for end users
- Worked with backend engineers to implement a caching layer to **reduce loading times by 25%**, increasing customer satisfaction by over 65%

Software Engineering Intern (Frontend)

January 2023 - April 2023

- **Worked with tech leads** to create an app using **TypeScript + React Native** to help users find food at nearby restaurants that match their dietary needs
- Followed an agile framework to keep the team on track
- Created initial designs and functionality for the main pages of the app including the restaurant homepage, menu item page, and filters
- **Worked directly with tester feedback** to iterate and improve the functionality and look of the application
- Designed several main pages including the welcome screen and user authentication flow which **increased user retention by over 10%**

Ollon is a software consulting company that creates unique and highly custom solutions for companies from e-commerce, mobile and web apps, to the Internet of Things and AI.

- **Worked with the CEO to develop a plan** to redevelop a machine learning model in Python into more reusable code
- Independently implemented the plan which resulted in **increasing the accuracy of the results by over 20% and decreasing the time elapsed by over 50%**
- Implemented an email status feature to increase transparency from the end user who is triggering the email to the backend system which sends the email, **decreasing the volume of error reporting and relieving unnecessary communications with the client**
- **Conducted code analysis and cleanup** while also fixing bugs and implementing new features in a computer vision mobile app which made up for months of missed work, catching the project up to the projected timeline and making it ready for launch
- **Worked directly with clients** to understand the product and suggest viable solutions to their issues and implemented these solutions for feedback rounds with the client



Engineering Society of Queen's University

Director of Information Technology

Kingston, Ontario

May 2023 - Present

The Engineering Society employs over 150 students and over 300 volunteers. It operates several businesses on campus as well as a wealth of clubs, conferences, design teams and events.

- Reduced disk usage of our main servers by over 25%, **avoiding a potential cost of over \$1000** to upgrade the server
- Resolved over 50 security issues across over 20 websites, **increasing the security and credibility of the organization** as a whole
- Implemented 100+ recurring cron jobs to backup sites, check security vulnerabilities, and update outdated software to help **maintain server upkeep and security automatically**

Software Development Team Manager

September 2022 - April 2023

- **Managed 3 project teams**, working on a Chrome extension for students, a video game that takes place on a university campus, and a computer vision weightlifting coach, **totalling 15 engineers**
- Led brainstorming sessions to **define project expectations, goals, and desired final product**
- Implemented a clear **project management and tracking structure using Notion and Slack** to ensure each team member contributed to the project and that their learning was supported by others

Projects

Check out more projects at joshfriedman.dev. All source code is available at github.com/jwigiff.

Infinipedia

An AI-powered online encyclopedia. Built using Next.JS, this project uses OpenAI's GPT-3 to generate a page for any topic you put in. Each page also displays links to related articles, which of course are also generated by GPT-3.

Playlist.AI

A playlist generator powered by OpenAI's GPT-3. This frontend was built using React and Vite SSG, while the backend was made using NodeJS and Express. This project interacts with OpenAI's API to generate a playlist based on the inputted songs and uses Spotify's API for music searching and retrieving song information.

Other Interests

There's more to me besides engineering! I have a passion for music, playing guitar and saxophone, as well as listening to R&B, Rock and Roll, Jazz and Pop music. I also ran a charity concert called Covid Creations that raised over \$14,000 for Sunnybrook Hospital's Covid Research Fund! Besides music, I enjoy playing hockey and have earned my 3rd degree black belt in Karate.

Testimonials

Josh is an integral part of Nutripair's team and consistently delivers exceptional contributions while always being someone you can count on to get the job done.

- Catlin Tran, Founder & CEO at Nutripair

I worked closely with Josh and can confidently vouch for his exceptional qualities. He seamlessly evolved from a front-end developer to a full-stack lead, excelling in learning new technologies, attention to detail, and consistent, reliable results—a valuable asset to any team or project.

- Shohei Yamashita, Front End Lead at Nutripair

Josh was able to quickly ramp up and start working on different projects in different languages. He worked well in a team, promptly bringing up blockers and issues he encountered making turnaround time on tasks short and productive.

- Chris Elcombe, Senior Developer at Ollon