

Zaki Machfj

3A MATHEMATICS - COMPUTER SCIENCE MAJOR

☎ (647) 710-7282 | ✉ zmachfj@uwaterloo.ca | 📍 ragizaki | in zaki-machfj | zakimachfj.vercel.app

Education

University of Waterloo

Waterloo, ON

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Sept. 2020 - May 2025

- **Relevant Coursework** — OOP in C++, Data Structures, Algorithms, Compilers, Database Design
- **Clubs** — Hyperloop Design Team, Intramural Basketball

About Me

- Languages** JavaScript, TypeScript, Python, C++, Golang
- Frameworks** React, Node, MySQL, AWS, Ruby on Rails, Flask, MongoDB, Express
- Interests** Fullstack Development, Blockchain, Machine Learning, Soccer

Experience

Dejero

Waterloo, ON

WEB APPLICATIONS DEVELOPER

May 2022 - Aug. 2022

- Implemented the company's new 2FA system from conception to deployment with Rails, Golang and MySQL, requested by over 60% of clients.
- Developed a custom, client-catered tooltip component in Angular and presented it to 30+ stakeholders with 100% approval to deploy
- Redesigned and coded 3 backend models with Ruby on Rails enabling 90+ clients to SSH into remote support sessions
- Modernized the backend by migrating existing Ruby scripts to Golang, increasing performance and query speed by 25%
- Built a notification system for monthly SIM data usage on client devices with Angular and Rails

Quill Podcasting

Toronto, ON

SOFTWARE DEVELOPER

May 2021 - Aug. 2021

- Built graphs with JavaScript and CSS to visualize clients' podcast analytics and retention metrics, resulting in a 24% increase in active users
- Implemented Figma designer mockups of a custom podcast player with JavaScript and TailwindCSS, requested by over 50% of the clients
- Converted Figma designs into UI components for an online podcasting tool with Alpine.js and TailwindCSS
- Designed and implemented data models in Ruby on Rails and PostgreSQL to model key podcast features

Projects

NatureCamp Fullstack App

- Built a Yelp clone for posting and rating popular campsites with Next.js, TypeScript and Prisma
- Implemented Google and Github authentication flows and credential signup/login using Next-Auth
- Parsed nested JSON data from a mock API to insert 100+ campsites and reviews into the Prisma database

Fantasy Football Notifier

- Created a notification system to inform users of injured fantasy football players with Python
- Web scraped injured players information from the official NFL website using BeautifulSoup4
- Implemented an email system with the SMTP Python module and cron to automate emails weekly

Wildfire iOS App

- Built a wildfire prevention and detection iOS app with Swift
- Won 1st place of 50 teams at the Waterloo NASA SpaceApps hackathon
- Leveraged NASA satellite API's (GOES-R) to automate potential wildfire detection in realtime (8 minutes)

Personal Website

- Built a personal website to showcase my interests and portfolio with React, TypeScript and Styled Components
- Implemented a feature to show most recently played song on Spotify with the Spotify and fetch API