

Ishan Ghimire

Software Engineer, University of Waterloo

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Skills

Languages | JavaScript, Ruby, Python, Go, C, C++, Scala, SQL

Technologies | Node.js, Rails, React, GraphQL, Pyramid, Docker, PostgreSQL, MongoDB, Flutter, Apollo

Experience

Software Engineering Intern | Flight Deck - Royal Canadian Air Force May 2020 - September 2020

- **Developed + shipped microservice**, a passport management application for **3100+ aircrew**, built with React/Rails
- Spearheaded creation/adoption of GraphQL API, **lowering load time significantly** by eliminating waterfall requests
- Transformed the central interface used by **1600+ aircrew daily** to track missions, **reducing data entry by 24%**
- Avoided reconstruction of database architecture for monolithic Rails application by implementing Active Model
- Boosted developer efficiency by introducing HMR and restructuring Docker workflow, cutting **startup time by 240%**

Software Engineering Intern | Tamvoes Health Inc. March 2020 - August 2020

- Architected, **developed and shipped entire payment infrastructure** for user subscriptions, utilizing **webhooks**
- Built **15+ REST APIs** in Pyramid, interacting with frontend Node.js server, PostgreSQL database, Redis, and Stripe
- **Reduced component load time by 34%**, replacing unnecessary AJAX calls by implementing a JWT solution
- **Doubled registration rate** on landing page by revamping UI and utilizing local storage to curate user experience
- Implemented internationalization site-wide with i18n and jQuery, **adding 52 countries to potential client base**

Full Stack Developer | ETHGlobal December 2019 - February 2020

- Developed a geocaching app gamifying city exploration for **800+ hackers** at ETHDenver, compensating users with tokens based on physical proximity to events, while recording transactions on a **blockchain built in Go**
- Migrated ETHWaterloo (hackathon) winning prototype's Flask API to Node.js/Express

Founder | Edmonds Engineered June 2018 - January 2020

- Founded edmondsengineered.com to help develop self-starting attitudes in highly under-privileged community
- Conceived and hosted 2 STEM Camps over 2 years for **230+ youth**
- Remotely led team of 5 developers in building educational, cross-platform Flutter based application

Projects

Go2Balancer | Concurrent TCP Load Balancer | *Net* | 🐙

- Built a lightweight TCP load balancer in Go using goroutines to concurrently handle large workloads
- Implemented a novel algorithm to optimally choose backend server with least active connections

COVID My Tweets | Covid-19 Sentiment Visualization | *Flask, Node.js, MongoDB* | 🐙 📊

- Developed algorithm to identify statistically significant geographic trends in social media sentiment towards Covid
- Featured self-updating heat map of North America, search feature for sentiment of any city

UnderratedTunes | Social Platform for Music Lovers | *Node.js, Express, MongoDB, Bootstrap* | 🐙

- Created underratedtunes.com, a platform connecting **100+** music-lovers posting/discussing underrated music
- Used Spotify API data to promote least popular songs to top of page and generate posts for authenticated users

Fun Guy Home Security | Remote Home Security | *Swift, Particle Photon* | 🐙

- Built iOS app allowing users to remotely toggle door locks, using Particle Photon and a PIR motion sensor
- Notified homeowners of break-ins with in-app notifications and text messages through Twilio

Education

University of Waterloo | Bachelor of Software Engineering (B.SE)
Software Engineering Entrance Scholarship

September 2019 - Present