

# Ishan Ghimire

Software Engineering, University of Waterloo

✉ ighimire@uwaterloo.ca

🌐 ishanghimire.tech

🐙 github.com/beshup

## Skills

Languages | JavaScript, Python, C++, Ruby, Go, 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 - Sept. 2020

- Transformed the central interface used by **1600+ aircrew** daily to track missions, reducing data entry by **24% on 80k data points**, directly resulting in **5000 hours** and **\$300k saved** for the Air Force in 2 months
- Developed and shipped passport management application for **3100+ aircrew**, as a **Rails/React** microservice
- Spearheaded creation/adoption of **GraphQL API**, lowering load time significantly by eliminating waterfall requests
- Individually introduced HMR with webpacker, and restructured **Docker** workflow, **cutting startup time by 58%**

### Software Engineering Intern | Tamvoes Health Inc.

Mar. 2020 - Aug. 2020

- Architected, **developed and shipped entire payment infrastructure** for user subscriptions, utilizing **webhooks**
- Built **15+ REST APIs** in Pyramid, interacting with **Node.js** server, **PostgreSQL** database, **Redis**, and Stripe
- Doubled registration rate** on landing page by utilizing local storage to curate user experience and redesigning UI
- Added 52 countries** to potential client base by implementing internationalization site-wide with i18n and jQuery

### Full Stack Developer | ETHGlobal

Dec. 2019 - Feb. 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 blockchain
- Recruited by ETHDenver to develop application after winning the ETHWaterloo hackathon with [similar project](#)

### Founder | Edmonds Engineered

Jun. 2018 - Jan. 2020

- Founded [edmondsengineered.com](#) to help develop self-starting attitudes in under-privileged community
- Created, organized and hosted 2 STEM Camps over 2 years for **150+ youth**
- Remotely led team of 5 developers in building educational, Flutter-based application

## Projects

### 3D Graphics Engine | Clay | C++ | 🐙

- Built graphics engine without use of external libraries, utilizing novel algorithms to simulate movement within 3D space
- Created **client-facing API** allowing manipulation of user-inputted objects, utilizing linear algebra to project 3D to 2D

### Concurrent TCP Load Balancer | Go2Balancer | Go, 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-19 Sentiment Visualization | C My Tweets | RU Hacks Top Project | Flask, Node.js, MongoDB | 🐙 🍌

- Developed application to identify statistically significant geographic trends in social media sentiment towards COVID-19
- Featured self-updating heat map of North America, and custom search feature to determine sentiment anywhere

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

- Created [underratedtunes.com](#), a platform connecting **100+** music-lovers posting/discussing user-inputted music
- Used Spotify API to promote least popular songs to top of page, and generate posts for **authenticated users**

## Education

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

2019 - Present

Software Engineering Entrance Scholarship