ZORAVUR SINGH

Student, Coder, Hacker. Let's work on something awesome.

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EXPERIENCE

Software Engineer

ROSS Intelligence, Inc.

May 2019 - Aug 2019 Toronto, ON

- Developed, tested, and deployed features in both the ROSS web application and various microservices.
- Extended ROSS's anti-corruption layer for managing subscriptions through the Stripe API. Added functionality to modify and cancel subscriptions. Written in Java.
- Developed the settings page for the ROSS web app and calculated user metrics by tracking events (e.g. button clicks, page navigations).
- Prepared technical briefs, estimating the engineering effort required for various projects. Lead the growth team in one of these projects (detailed to the right).

TECHNOLOGIES

Proficient Languages
Javascript, Python, Java, C, C++, Scheme

Web Tooling
Typescript, Node, React & Redux, Firebase

DevOps
Docker, Git, Kubernetes, Flux, Travis CI

Tooling
Bash, Postgres, Vim, JetBrains (IntelliJ) suite

SKILLS

Full Stack Development | Linux/Unix environments | Scripting (Shell/Python) | Functional Programming | Data Structures & Algorithms | OOP | TDD | Machine Learning | DevOps | Scrum

ACHIEVEMENTS

President's Scholarship of Distinction

University of Waterloo May 2018

This scholarship is given to students with a high school average of over 95%.

2nd place - UTRAHacks

University of Toronto Jan 2019

Built a robotic headlamp controlled by hand gestures. Won the prize for best usage of LEAP motion sensors, as well as second place overall among 25+ teams.

SELECTED PROJECTS

ROSS Instant Users

Instant access to ROSS Intelligence's web application

Jun 2019 - Aug 2019 ROSS Intelligence

- Developed new Python microservice which granted users without an account (instant users) access to the ROSS web app.
- Extended ROSS's user tier system to include instant users, ensuring that all existing features function regardless of account type.
- Created a specialized UI in React/Redux designed to encourage signups from instant users.
- Used browser technologies (cookies, fingerprinting) and IP addresses to uniquely identify users across sessions and prevent excessive usage.
- **Tech stack:** CSS, JS (React/Redux), Groovy (Grails), Python (FastAPI), Postgres, Kubernetes, Flux

Stream-transduce

Functional programming with Node.js streams

Dec 2018

- Created and published a library designed to produce and consume Node.js streams in a functional paradigm.
- Ensured interoperability with other functional programming libraries, such as Ramda, by implementing the transducer protocol.
- Used best practices in documentation (JSDoc), testing (Jest), and semantic versioning (through npm) to ensure usability.

Gravity.js

A physics engine in the browser

Jun 2018 – Nov 2018

- Developed a highly accurate real-time gravity simulation, designed to encourage the exploration of orbital mechanics.
- Implemented particle path tracking, a number of numerical integration methods, and an intuitive UI for controlling physics constants.
- Used multithreading through Web Workers and HTML5 Canvas to achieve optimal performance.

EDUCATION

Bachelor of Computer Science

University of Waterloo

2018 - 2023 (expected) Waterloo, ON

- Dean's Honour List
- GPA: 86.18