

# **EDUCATION**

#### **IIT Roorkee**

### **B.Tech.** in Civil Engineering

Cumulative GPA: 8.087 / 10 Senior Year

Expected May 2021

# **SKILLS**

### Languages

Go, JavaScript/TypeScript, Python, C/C++. Rust

### **Technologies**

Git, NodeJS, Docker, Django, React, Vue, Vim

# **ACTIVITIES**

# Inter IIT Tech Meet

# Gold Medalist (2019)

 Won the coding hackathon by creating an application to detect potholes live while recording.

### **UST Global d3code**

# Winner (2019)

- Wrote a cross-platform application to transfer CSV dumps into relational databases.
- The app detected any errors in datatypes and predicted types from raw data.

## **MISCELLANEOUS**

### Caddy

### **Open Source Contributor**

- Contributed in adding the "fmt" command.
- Developed the Git module for v2 of the server to automate deployments of applications.

### Cerebro

#### **SDSLabs**

 Maintained Cerebro — a platform for predictive modelling and analytics competitions.

# Inter IIT Tech Meet

### Head of Technology (2018)

 Spearheaded the development of the official website of the 8th Inter IIT Tech Meet.

# Convocation App

#### IIT Roorkee (2018)

 Developed and maintained the API for the convocation app for the batch of 2018.

# **REFERENCES**

#### Tim Abbott

### **Lead Developer**

Zulip Open Source Project <a href="mailto:tabbott@zulipchat.com">tabbott@zulipchat.com</a>

# **EXPERIENCE**

### **Goldman Sachs**

# Summer Internship (May to June 2020)

- Worked on a time-series database for adding a processor to build consolidated order books.
- Built the processor that generates the consolidated order book for multiple symbols and levels.
- Integrated the processor with various APIs in different languages (C++, Java and Python).

# **Zulip Open Source Project**

### **GSoC Mentor** (since April 2020)

- Mentored university students to contribute to Zulip as a part of Google Summer of Code.
- · Contributed to solving various issues related to UI/UX of the web app.

### Google Summer of Code (with Zulip)

### Student Developer (May to August 2019)

- Added various features such as creating transcripts of conversations, adding notifications for various message events.
- Worked on the events system used to update data across the backend and the frontend of the web application.
- · Re-engineered components like message-box, drafts and message edit-history.

# **PROJECTS**

### **Pinger**

### SDSLabs (since September 2019)

- Built an uptime and status monitoring application with pluggable probes and storage backends.
- Developed the agents responsible for executing checks and the central API server to assign checks and keep a health-check on workers.
- Integrated check probes including TCP, UDP, DNS, ICMP, HTTP and WebSocket with storage backends TimescaleDB and Prometheus.

### Gasper

### SDSLabs (August 2018 to August 2019)

- Built a PaaS that can deploy and scale web applications based on various languages and database engines.
- Developed the core pipeline required for packaging applications into Docker containers and deploying them.
- · Wrote a web based UI for accessing the platform in Vue JS.

#### Kiwi

### SDSLabs (since June 2020)

- · Created a thread safe in memory key value store that can be extended for various data structures.
- Integrated data structures such as vector, set, scored set and map.
- Built a system for creating persistent backups for the store and mechanism for reviving server.

# Watchdog

### SDSLabs (since January 2020)

- · A server management tool which keeps track of administrative rights attempts made via SSH.
- · Provides an easy way to grant/revoke access through a centralised repository on Github.
- · Added the notifier interface and integrated Slack and Discord notifiers to report access attempts.

#### Leaf

### Personal Project (February to May 2020)

- Wrote a command-line tool that watches for changes in the working directory and runs user defined commands.
- The package exposes an API to aid in building customised hot-reloader for different projects.

### LEADERSHIP

# **Secretary**

# SDSLabs (since June 2020)

- Regularly conducted hackathons, workshops and competitions for university students.
- Presented hands-on workshops on various topics including but not limited to server management, operating Linux and cloud native technologies.
- · Spearheaded development of various projects, contributing to design, discussion and testing.

# WatchOut

### Web Developer (since August 2018)

- · Responsible for building and maintaining the web infrastructure of the student media body of IITR.
- · Actively contribute to discussions regarding on going activities and ideas for new articles.