

# Portfolio GitHub LinkedIn Medium ritikkne@gmail.com | rkumar1@cs.iitr.ac.in

# **SUMMARY**

Back end and DevOps programmer interested in Computer Networks & Protocols, Cloud and Distributed Computing. Open
Source contributor.

Microsoft 2020

• Developed
• Set up the

## SKILLS

#### **LANGUAGES**

#### Comfortable

Python, Java, Go, JavaScript, TypeScript, HTML/CSS, Markdown, bash

#### Familiar

Kotlin, C, C++, C#, Q#, C, CoffeeScript

#### FRAMEWORKS/LIBRARIES

#### Comfortable

AWS Boto, Django, Android Java Framework, Bee (Go)

#### Familiar

.NET

### SOFTWARE/TOOLS/SERVICES

Git & GitHub, CI (Circle), Sentry Vim, Sublime Text, VScode, JetBrains IDEs make, Doxygen, ssh, Nginx, Docker, Docker-compose

MongoDB, PostgreSQL, Redis Cache, Elastic Search

Mininet, Wireshark, Tcpdump Heroku, Firebase-GCP, AWS

GNU/Linux 20.04.1 LTS, Windows 10 Home

# **EDUCATION**

# B. TECH., COMPUTER SCI. AND ENGG.

CGPA 8.216

Indian Institute of Technology, Roorkee, India (2021)

## SENIOR SECONDARY EDUCA-TION

Boards 92%

# RESPONSIBILITY

- Back-end & Systems Developer and Mentor @MDG IIT Roorkee.
- Product Manager @Appetizer.
- Volunteer @NSS IIT Roorkee.

## **EXPERIENCE**

# Back end and DevOps programmer inter- MICROSOFT EDGE | SOFTWARE DEVELOPER REMOTE INTERN ested in Computer Networks & Protocols, Microsoft 2020

- Developed a new feature to share EDGE Collections.
- Set up the service to share the Collection and looked into syncing them.
- Modified the Edge's codebase to modify and expose the API.

# GOOGLE SUMMER OF CODE | STUDENT DEVELOPER | LINK

Named Data Network 2019

- Developed NpChat, a photo and file-sharing peer-to-peer decentralised application built on Android on NDN (ICN). Access control is ensured using encryption and data is fetched using AIMD pipelined Segment-Fetcher.
- Wrote the AIMD pipelined Segment-Fetcher for their Java Support Library.
- Updated the user Identity management application for NpChat.

### **BLOGS** | TECHNICAL WRITER | LINK

Wrote a number of blogs on Computer Networks and Protocols.

## **PROJECTS**

## APPETIZER | PRODUCT MANAGER & BACK END HEAD | LINK

MDG IIT Roorkee

Appetizer is official mobile application for IIT Roorkee aiming towards the management of mess functionalities. Features include providing mess menu, recording the presence of students, give a rebate and simplify feedback processes.

- Developed new features on the back end while maintaining existing ones.
- Worked on Database Query Optimizing and reducing Network Traffic.
- Implemented and tested multi-messing feature.
- Handled the servers ensuring least service downtime.

### CODEPHILE | BACK-END HEAD | LINK

MDG IIT Roorkee

Codephile is a social networking application for competitive coders. Web application is written in Go-Lang using bee framework. It scrapes or make API requests to the platforms to show progress and statistics on users and his friends. The tech stack includes Redis, Elasticache, AWS-EC2, Firebase, Nginx, MongoDB, docker & Bee

• Headed & mentored the back-end development and server deployment.

### FILE SHARE | DEVELOPER | LINK

**IIT Roorkee** 

File Share is a socket based file sharing application written in C++ and Sockets. The application also aims to provide a web interface to communicate to browsers via Web-Sockets.

# ACHIEVEMENTS

- Successfully ran Appetizer in the campus for 1 yr with the highest daily active user count of more than 3500.
- Our team stood 3rd in Hackinthenorth hackathon at IIIT Allahabad.
- Secured All India Rank 1172 in JEE Advanced 2017 among 2, 20,000 students & 777 in JEE Main 2017 among 1.5 million students.