# Rishi Chordia

🤳 +918197914054 🛮 rishichordia.1206@gmail.com 📅 rishi-chordia 🌎 rishichordia 📢 rishichordia.github.io

## Education

## Indian Institute Of Technology Roorkee

Aug 2018-Jun 2022

Bachelor of Technology in Computer Science (CGPA: 9.243 / 10)

Roorkee

• Coursework: Data Structures, Computer Networks, DBMS, Operating Systems, System Software, Computer Architecture, Advanced Algorithms, Cloud Computing, Information & Network Security, Theory of Computation

# Experience

## **Microsoft** | Software Engineer, Bangalore

Aug 2022 - Present

- As a part of MGDC, Optimized the core extraction platform, using multi-threading concepts in C#, to reduce the time of data extraction for huge tenants, from several days to just a few minutes.
- Worked on automation tools for dataset on-boarding using LLM's to generate the necessary files. Created chat-bots to help ease the process of onboarding api's as a support assistant.
- As a part of WPA team, worked on projects like optimization of latency of data flow; creation and, management of data flow pipelines using ADF; privacy scrubbing using Apache Spark and Hadoop clusters.

#### **Rephrase.ai** | Software Engineer Intern, Bangalore

May 2022-Aug 2022

• Profiled and Optimized system latency in streaming huge files by a factor of 100x from a few seconds to a couple of milliseconds

## Microsoft | Software Engineer Intern, Azure Cloud, Bangalore

May 2021 - Aug 2021

• Designed and Implemented gRPC communication between microservices to optimize the latency by 10x from the existing systems.

# **Projects**

# **No-SQL based Distributed Database System** | BTech Project, IIT Roorkee

Fall 2021-Spring 2022

• Built a No-SQL-based key-value distributed database Go. IMplemented RAFT consensus algorithm and bench marked the database on 1000 writes/second.

# Security attacks and Reverse-engineering of modern Hardware components | ACM, IIT Roorkee

• Reverse engineered CPU cache size and associativity, demonstrated covert channel attack using LLC cache and flush-restore model. Also demonstrated spectre attack using a cache side channel and speculative execution. Link to **Project** 

#### **KSOS** | ACM Student Chapter, IIT Roorkee

Fall 2021-Spring 2022

• Built an linux kernel from scratch for x86, with a custom boot loader. Implemented a FAT12 file system to store and load the kernel. Built interrupt handlers and virtual memory management systems in the kernel and wrote a simple shell program. Link To Project

#### **POS Tagger** | CSN-371 Artificial Intelligence, IIT Roorkee

Fall 2020

• Created a Part-of-Speech tag predictor for english language using the Hidden Markov Model and the viterbi algorithm. Link To Project

# **Technical Skills**

Languages: C#, C/C++, Python, Apache Spark, Bash, SQL, Latex, HTML/CSS

Technologies: Django, Flask, Ruby on Rails, Vim, Docker, Git, GNU/Linux, CMake, Azure

# Positions Of Responsibilities — Teaching Assistantships

## **Learning Seminars** | SIDE team

Microsoft IDC, Bangalore

 Orchestrated the learning seminars in E+D org of Microsoft on topics related to Distributed Computing like Distributed Consensus Protocols(RAFT & Paxos), for the knowledge and growth of colleagues.

#### **ACM Student Chapter** | Head Os & Computer Architecature

IIT Roorkee

· Organised biweekly lectures on OS and comp. architecture. Organised open-workshops that taught students to build small programs like a custom Linux-shell(using multiprocessing), multi-threaded client-server chat applications etc,