ARPIT GUPTA

WORK EXPERIENCE

Google May 2024 - Present

Software Engineer

- Currently working as a part of Backup for Google Kubernetes Engine Team.

Oracle, India

July 2021 - May 2024

Senior Member of Technical Staff - OBIS Diagnostic Team

- Created CRUD APIs to query Object Storage (Global Cache) in a Distributed Cache System for multi-tenant architecture. Member of Technical Staff - OBIS Diagnostic Team
- Enhanced JavaDS on OCI with API support for 3 data warehouses, offering 50x cost savings via OSCS log storage.
- Optimized long-running queries by implementing connection pooling in C++, reducing opened sockets from 16k to < 10.
- Contributed to migration of OAC from a docker container to K8s Architecture.
- Implemented Kerberos Authentication support for ODBC drivers in C++.
- Contributed to Connection API project, to design API support for diverse Data Sources, to benefit various organizations.
- Improved JavaDS Shared Library, to load dependencies at runtime, which reduces duplicates, and creates a lighter artifact.
- Developed a system for 100% automated environment provisioning across multiple versions to save the team 100hrs/week.
- Collaborated on Preflights to configure 10 data sources with 25 configurations to ensure thorough test coverage.

American Express May 2020 - July 2020

Software Intern

- Devised a project to optimize inter-microservice communication latency by selecting an effective communication mechanism
- Conducted comprehensive load testing of applications using Apache JMeter to reduce average response time by 10x.

Google Summer of Code

May 2019 - August 2019

Software Intern - GNU Radio

- Engineered a Python API that interacts with GNU Radio block headers in C++ to 100% automate its parsing and gathers information | GNU Radio tools GRC, GRModTool, and other open-source projects use this API.
- Enhanced the API's usability by implementing Command-Line support.

EDUCATION

Indian Institute of Technology, Roorkee

August 2017 - July 2021

B.Tech. in Electronics and Communication Engineering, CGPA: 8.43

Saint Soldier Convent School, Punjab

April 2014 - March 2016

AISSCE, 91.2%

Dasmesh Public School, Punjab

April 2013 - March 2014

CBSE, CGPA: 10

PROJECTS

OraHacks'24 Project | Oracle

- Implemented a standalone class conflict finder library to find conflicting class versions in multiple jar/war files. | Enables self troubleshoot saving 300 hours.

OraHacks'23 Project | Oracle

- Introduced a dashboard for the OBIS team to provide a centralized solution for instant addition of any data source | Easily extensible to OAC | Enables self-troubleshoot saving \$50k/year | Highly valued by senior management.

Placement Online | IIT Roorkee

- The official application for placements and internships at IIT Roorkee digitizing the entire process for 2.5K students.
- Deployed a scalable backend architecture for an application that successfully handled 100K requests/day.

Omniport | **IIT Roorkee**

- Omniport is open-source software for institutes to deploy a version of Channel (Intranet portal for IITR) and tailor it according to user's need efficiently | Devised several new features and integrated 3 applications into the portal.

Lectures and Tutorials Portal (LecTut) | IIT Roorkee

- Developed and launched a study portal for 8,000 users at IITR to accelerate academic progress by providing comprehensive resources and interactive learning tools.

Other Notable Project | IIT Roorkee

- Omniport-service-comments | Linguistic Summarization of Clusters | Facial Feature Detection and Reenactment Onto Computer Generated Imagery

AWARDS / SCHOLARSHIPS / ACADEMIC ACHIEVEMENTS

Global Competitions: ACM ICPC Regionalist | *131st* position in ICPC Online Qualifier | Invited to FOSDEM 2020, Brussels, to represent GNU Radio.

College Competitions: 5th position in the Syntax Error Hackathon.

National Examinations: AIR 1237, JEE Adv 2017 | AIR 1583, JEE Mains 2017 | NTSE Scholar 2012: AIR: 105.

SKILLS

Programming Languages: C/C++, Python, Java

Software Packages: Linux, Django, DRF, Git, Vim, VS Code, Docker, Kubernetes, Jenkins (CI / CD)

Software Engineering Skills: Object Oriented Design, Data Structures, Algorithms, System Design, Microservices, Scalable Services, Unit Testing, Code Reviews, Computer Science, Distributed Systems, Web Development, Problem Solving

Languages Known: English (SRW), Hindi (SRW), Punjabi (SRW)

POSITIONS OF RESPONSIBILITY & EXTRA CURRICULARS

- Lead Backend Developer @ Information Management Group, IIT Roorkee
- Competitive Programming | Codechef: check12331 5 star (Max rating: 2057) | Codeforces: meeee (Max rating: 1811)
- Contributor @ GNU Radio
- Mentor @ Student Mentorship Program, IIT Roorkee