

ARPIT GUPTA

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WORK EXPERIENCE

Oracle, India

July 2021 - Present

Member of Technical Staff - OBIS Diagnostic Team

- Implemented and added new provider support for Google Analytics 4, Big Query, Object Storage Connector (OSCS), and Databricks in Java Data Source | OSCS provides efficient log storage and serves as a consolidated store for all cache files which makes it 50x cheaper than Redis.
- Reduced the number of opened sockets from 16k to < 10 during long-running query data retrieval by adding connection pooling in OBIS.
- Contributed to the Connection API project by leveraging intelligent design to create API support for multiple Data Sources consumed by organizations such as JPL.
- Enhanced JavaDS Shared Library project to load required libraries at runtime from a shared location | Results in reducing duplicate libraries and creating a lighter artifact.
- 100% automated Test architecture, overseeing a Jenkins Job that created a new OAC Test environment biweekly, resulting in streamlined environment provisioning and improved testing efficiency.
- Collaborated on Preflights to configure 10 data sources (including Oracle, PostgreSQL, MySQL, Spark) with 25 configurations (ex: SSL, Kerberos Auth) for query execution in preflight scenarios to ensure thorough test coverage.

American Express

May 2020 - July 2020

Software Intern

- Devised a project for optimizing inter-micro-service communication latency by selecting an effective communication mechanism among REST, gRPC, and Vert.x clustering.
- 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 (coded 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'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 ChannelI (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

- Honourable Mention in ICPC Amritapuri Regionals.
- *131st* Place in ICPC Online Qualifier out of 3505.
- Invited to FOSDEM 2020, Brussels, to represent GNU Radio.
- Global Rank *37* in Code Ensemble 2020, Codechef.
- Global Rank *246* August Lunchtime 2020, Division 1, CodeChef.
- *5th* position in the Syntax Error Hackathon.
- All India Rank *1237*, JEE Advanced 2017.
- All India Rank *1583*, JEE Mains 2017.
- NTSE (National Talent Search Examination) Scholar 2012 | State Rank: *19* | National Rank: *105*.

SKILLS

Computer Languages: C++, Python, Java, SQL

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

Software Skills: Object Oriented Design, Data Structures and Algorithms, System Design, Microservices, Software Development

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

POSITIONS OF RESPONSIBILITY & EXTRA CURRICULARS

Chief of Security | Information Management Group, IIT Roorkee

- Responsible for developing and maintaining the backend infrastructure.

Competitive Programming | Online Judges

- Codechef: check12331 - *5 star* (Max rating: *2057*) | Codeforces: meeee (Max rating: *1811*)

Contributor | GNU Radio

- Responsible for creating and maintaining Blocktool.

Mentor | Student Mentorship Program, IIT Roorkee

- Mentored 7 freshmen students in academics as well as extracurricular activities.