

Prakhar Uniyal

prakhar.uniyal1@gmail.com | 831-863-1214

EDUCATION

IIT MANDI

BTECH

COMPUTER SCIENCE ENGG

Aug 2018 - June 2022

CGPA: 8.00 / 10

COURSEWORK

Applied Database Practicum

Comm. of Distributed

Processes

Compiler Design

Data Structures and Algorithm

Information and Database

Systems

Large Applications Practicum

Machine Learning

Map Reduce and Big Data

Paradigms of Programming

Pattern Recognition

Probability and Statistics

Program Analysis

Scalable Systems

Systems Practicum

SKILLS

PROGRAMMING

Over 5000 lines:

C++ • Python • Bash • JS/TS

Over 1000 lines:

C • Java • PHP • Ruby

WEB DEV

• Django REST • Flask

• ExpressJS

• ReactJS

DATA

• MySQL • PostgreSQL

• MongoDB • Redis

• Spark • Pandas

• GraphQL

DEVOPS

• Git • GitHub Actions

• Docker • Kubernetes

• Terraform

AWS

• EC2 • ECS • EKS

• Lambda • SNS • SQS

• S3 • VPC

WORK EXPERIENCE

TRILOGY INNOVATIONS (CODENATION) | SOFTWARE ENGINEER

Aug 2022 - May 2023

Process Best Practices

- Part of the team that developed the best practices platform for TI. Made significant contributions to the UI in React and backend API in Django.
- Handled platform integration with Google Drive, GitHub and AWS APIs for project specific resource creation.
- Authored the create-react-app template and integrated the Open-Chakra UI template to be used via the platform.

Engine Yard Containers

- Worked on the implementation of multi-tenancy for EYK Kubernetes cluster offering and suggested architectural changes for the same.
- Did comparative feature analysis of various deployment offerings provided by cloud providers as well as solutions for building event-driven applications in Kubernetes ecosystem such as KEDA and KNative.
- Analysed the metrics collected in the cluster offering to identify and discard unnecessary ones in order to bring down costs.

Devflows

- Tried making a compiler for optimizing the architecture used for devflows flow execution.
- Used Apache NiFi to represent flow DAG units to be executed in a single AWS Lambda.

COUTURE.AI | FULL STACK DEVELOPER (INTERN)

Dec 2021 - Jan 2022

- Worked on migration and deployment of JupyterHub service in a Kubernetes environment which was earlier running in an EC2 instance.
- Fixed minor configuration issues which enabled the use of remote spark clusters in Jupyter Notebooks.

MIBI SERVICES | BACKEND DEVELOPER (INTERN)

Feb 2021 - Apr 2021

- Implemented resolvers for GraphQL queries and mutations.
- Suggested changes in the data models of the application.

PROJECTS

COLLABORATIVE CODING PLATFORM | Mar'21-May'21

Developed a collaborative coding platform for real time code sharing and text/video communication. Used Docker containers to implement the back-end functionality in order to safeguard the server machine from malicious codes and RCEs.

FAQ CHATBOT | Jan'21

Developed a Telegram Chatbot for getting answers to frequently asked questions of freshers coming to IIT Mandi. Incorporated programming doubts resolution through answers from StackOverflow. Also implemented support for audio queries.

ACHIEVEMENTS AND ACTIVITIES

Codechef: 2086(5 star) **LeetCode:** 1787 **Codeforces:** 1711(Expert)

JEE 2018 Main AIR 5328, Advanced AIR 3644

Ranked 29/3245 in Codechef January 2020 Cook-Off (Div2)

Utkarsh-2019(Intra college techfest) Codefights(1st), Robosoccer(2nd).

TA for the courses 'Comm. of distributed processes' and 'Mathematical Foundations of CS'.

E-Cell, IIT Mandi volunteer and then student coordinator for the AY 2019-20.