# DEEPALI SINGH

### **EDUCATION**

# Indian Institute of Technology Mandi

July 2019 - June 2023

- BTech. in Computer Science and Engineering, CGPA 9.01
- Relevant Coursework: Data Structures and Algorithms, Information and Database Systems, Data Science Probability, Statistics & Machine Learning, Applied Databases Practicum, Computer Organisation, Introduction to Deep Learning, Machine Learning in Crowd Modelling & Simulation (Praktikum at TU Munich)

### **EXPERIENCE**

### Samsung R&D Bangalore

June 2022 - Present

 $Software\ Development\ Internship$ 

- Working in Samsung Ads team to convert batch data processing system to a Spark streaming application using distributed systems.
- Major challenges include de-duplication and anonymisation of Ad tracking data in a stream process.

# Technical University of Munich

Oct 2021 - March 2022

Semester Exchange

- Spent the 5th semester of my Bachelor's as Winter Semester 21/22 exchange student at TU Munich one of the top technical universities in EU.
- Successfully completed course on Introduction to Deep Learning, Master's Praktikum on Machine Learning in Crowd Modelling & Simulation, and a seminar on Data Visualization.

# Indian Institute of Technology Mandi

July 2021 - Nov 2021

Teaching Assistant

Teaching Assistant for IIT Mandi Courses CS202 - Data Structures & Algorithms under Dr. Varunkumar Jayapaul and IC252 - Data Science II under Dr. Satyajit Thakor.

The Girl Code

July 2020 - Sept 2021

Community Manager

- The Girl Code is a non-profit organisation that aims to introduce young girls to the world of programming by hosting workshops, guiding, and providing resources.
- Single-handedly built, managed, and expanded the online community which is now thriving with 2000+ girls mainly from India, Singapore, and the USA.
- Hosted programming workshops in Data Science and Machine Learning.
- Coordinated with Chapter-Leads and coding YouTubers to curate the online workshops in programming and supervised the interns as the workspace admin.

### SKILLS

- Programming Languages: Python, C++, Scala, JavaScript
- Frameworks/Technologies: MySQL, NodeJS, MongoDB, Firebase, Spark, Flask<sup>0</sup>
- Other Tools: Git, GitHub, Jupyter Notebook, LaTeX, Socket.IO<sup>0</sup>

# KEY PROJECTS

### Wiki Images [github link]

Oct 2020 - September 2021

under Dr. T A. Gonsalves - Former Director, IIT Mandi

- Developed a python script to scrape all the Wikipedia pages and retrieve useful information about images posted in Wikimedia Commons by a user.
- This work enabled the Wikimedians community of IIT Mandi to fetch the needed data 10x faster and is now widely used amongst them.
- Working on v1.3.6 to reduce the request rate and avoid race condition while using module threading. (Python, BeautifulSoup)

# IPL Auction Platform [website link]

July 2020 - Sept 2020

 $ECell\ Event$ 

- Designed and implemented a standalone website to manage the entire auctioning of players in the Indian Premier League.
- Implemented real time communication with web-sockets using firestore and the back-end controlled by an admin panel with features such as player management, accounts management for teams, and live leaderboard.
- $\bullet \ \ \text{Expanded it as a quiz platform to conduct various other college events.} \ \ (Python, \ Firestore, \ ReactJS)$

## Dehla Pakad [website link]

July 2020

Group Project

• Built a web app multiplayer card game with online lobby in lockdown 1.0 when couldn't find online version of the game anywhere on the internet. (Flask-Socket.IO, SQLite3, Python, JavaScript)

### ACADEMIC ACHIEVEMENTS

- $\bullet$  Academic Excellence Award in CSE at IIT Mandi for a cademic year 2020-2021
- $\bullet$  Scored 96.2% in 12th CBSE Boards in top 1 percentile of 12th CBSE Board Exam in 2019
- $\bullet$  Won first prize in Hack36 a 36 hours long IIT Mandi hackathon as all women team [GitHub Link]
- First Runner Up in Enigma a 12 hours long Machine Learning hackathon by Astrax'21 IIT Mandi
- First Runner Up in ACM-W Algorithm Contest'21 by ACM-W IIT Mandi [YouTube Link]

### RESPONSIBILITIES

- Core Member, Programming Club: Actively contributed to the programming community of the college and co-organised FrostHack'21.
- Media Head, Literary Society: Monitored the media presence, monthly newsletters, and e-magazines.
- Social Media and Outreach Head, Hiking and Trekking Club: Handled online accounts, curated content, and managed outreach.
- Mentor, Guidance and Counselling Service: Mentor for the batch 2024 and 2025 joining the B.Tech program at IIT Mandi.

## EXTRA-CIRRUCULAR

- ullet Represented IIT Mandi in Group Dance and Creative Writing at Inter-IIT Cultural Meet 4.0 at IIT Bombay
- Completed Junior Diploma in Kathak Dance at the age of 8
- Core Member of Literary Society, Dance Club, Hiking and Trekking Club