DIVYANSH VINAYAK

206 B19 Suraj Taal Hostel, IIT Mandi, Kamand, Himachal Pradesh 175005, India

Education

Indian Institute of Technology Mandi

July 2019 - June 2023

Bachelor of Technology in Computer Science and Engineering, CGPA: 8.24

Himachal Pradesh, India

Relevant Coursework

• Data Structures

• Databases • Data Science Operating Systems Computer Networks

• Computer Organization

Experience

Arista Networks

• Algorithms

January 2022 - June 2022

Incoming Software Engineer Intern

Bangalore, India

Indian Institute of Technology Mandi

August 2021 - November 2021

Teaching Assistant

Himachal Pradesh, India

• Courses: Data Structures and Algorithms and Applied Databases Practicum.

Projects

Fake Face Image Classification | Python, TensorFlow, XGBoost

December 2021

- Classified images of human faces as real or fake by using the stacking ensemble based deep learning model utilizing Inception V3 and VGG16 as base learners and achieved a mean F-score of 0.977.
- Improved the performance of model using techniques like data augmentation and XGBoost gradient boosting algorithm.

Diabetes Prediction | Python, scikit-learn

August 2021

- Compared various statistical learning models like KNN, Naive Bayes, logistic regression and SVM to predict whether a patient has diabetes or not based on certain diagnostic measurements.
- Utilized data preprocessing methods to clean and normalize the data, dropped insignificant features and used hyperparameter tuning to select the optimal model architecture for each model.

Instant Messaging Application | Dart, Flutter, Socket.IO, Hive

May 2021

- Developed an Android application using Dart and the Flutter framework to send and receive text messages to other users individually or in groups using the WebSocket based server deployed on Heroku.
- It supports all CRUD operations and also has a typing indicator.

Dynamic Segment Tree $\mid C++$

December 2020

- Implemented a header file for dynamic segment tree by using the augmented red-black tree data structure to support insertion, deletion, search, range query and range update operations in logarithmic time complexity.
- Ran a benchmark to compare its performance with a naive algorithm.

Technical Skills

Languages: C, C++, Python, Java, JavaScript, Dart, SQL, HTML/CSS

Libraries/Frameworks: Flutter, TensorFlow, Node.js, Express, Socket.IO, Django, Hadoop

Tools: MySQL, MongoDB, Jupyter, Heroku, Git, Linux

Achievements

- ICPC 2020: Represented IIT Mandi at the ICPC 2020 Gwalior-Pune Regional Contest ICPCID.
- Google Kick Start 2021: Secured a global rank of 355 in Round G of Google Kick Start 2021 Certificate.
- Facebook Hacker Cup 2021: Qualified for round 2 Certificate.
- CodeChef: Rated 5 star with a rating of 2056. Handle divyansh_io.
- Codeforces: Achieved maximum rating of 1526. Handle RandomNumber.

Extracurricular

- Core Team Member of Space Technology and Astronomy Cell, the astronomy club of IIT Mandi.
- Web Developer for the website of AstraX'20, the intercollegiate astro-meet of IIT Mandi.