# **GOPAL RAMESH DAHALE**

**Undergraduate** 

## **EDUCATION**

BTech (Honours) in Electrical Engineering with specialization in Computer Science

Indian Institute of Technology, Bhilai

Aug 2018 - Ongoing

9.11/10.0

Coursework

• Graph Theory & Applications

Operating Systems

• Data Analytics & Visualisation

 Neural Networks & Deep Learning (Coursera)

### High School

Kendriya Vidyalaya, ONGC Panvel

**2017 - 2018** 

**9**5.6 %

## **PROJECTS**

Distribution & Requirement of Medical Resources for Covid 19 & Factors Affecting Hospitalization

**Sept 2020 - Nov 2020** 

C Link

- As a member of team of 5, analysed and predicted the ICU admission of confirmed cases using models like Logistic Regression, ROC-AUC.
- Proposed a window model to make the prediciton more clinically relevant and achieved a R2-score of 0.8+ over test datasets.
- Extracted & visualized weekly hospitalization rates in USA for various age-groups and medical conditions.
- Utilized: Python, Pandas, NumPy, Plotly, Scikit-Learn.

### **Playlist Creation**

**Aug** 2020 - Sept 2020

C Link

- Automated the task of playlist recommendation using a **scoring function based on Borda's method** for 3 different topics.
- Extracted about **3000 videos data using Youtube Data API** using filters. Preprocessed, analysed and visualised the data & Tabulated my results.
- Utilized: Python, Matplotlib, Pandas, NumPy.

### Detecting Covid 19 with Chest X-rays

**i** July 2020- Aug 2020

C Link

- Classified Covid, viral & normal cases using Resnet18 pretrained model. Transformed and augmented the data & achieved 0.95+ accuracy.
- Deployed a simple streamlit web app to showcase the results.
- <u>Utilized:</u> Python, Pytorch, NumPy, Matplotlib, Streamlit, Flask.

#### Covid 19 India Tracker

**May 2020 - June 2020** 

C Link

- Developed an Android app using for tracking Covid spread in Indian states & districts. Illustrated the data using India map.
- Preprocessed the data obtained from covid19india/api.
- Utilized: Kotlin, Javascript.

#### Load Flow Analysis

Feb 2020 - April 2020

C Link

- Solved the Load-Flow problem using Guass-Seidel iterative method.
- Utilized: C++.

## **EXPERIENCE**

#### SWE Summer Intern

#### **MeetAl**

**May 2021 - July 2021** 

Remote

- Revamped the UI/ UX by of the project (Telgro) by implementing Material-UI styling.
- Desgined and implemented RESTful APIs in Diango.
- Managed continuous maintenance, troubleshooting and deployment of Frontend & Backend.
- Designed a 3PL item response model to incorporate response time for predicting student's response.
- Designed a Lognormal RT model for predicting student's speed.
- Validated with 80% accuracy on synthetic data. and deployed the models/infrastructure and software that uses these models.
- Leveraged Knowledge of ReactJs, Django, Material-UI, Firebase, Heroku

#### SWE Winter Intern

#### Newzera

Dec 2020 - Jan 2021

Remote

- Created 5 GraphQL APIs (Queries, Mutations) for friends & following in Newzera's Application.
- Performed Query Performance Analysis on MySQL queries for the APIs.
- Integrated those APIs in frontend along with pagination of data.
- Tested those APIs for loading, data & error states and achieved a test coverage of 95%+ on both client side & backend.
- Leveraged Knowledge of React Native, GraphQL, Apollo Client, MySQL, Git, Jest, Enzyme

#### C++ Developer Intern

#### cppsecrets.com

**Aug** 2019 - Nov 2019

Remot

- Published 10+ articles on C++ Boost chrono library with over 1500+ views and 50+ likes.
- Leveraged Knowledge of C++, Boost

## **STRENGTHS**

Proficient: C/C++ Python ReactJs Firebase

Familiar: Django Kotlin React Native

GraphQL MySQL Jest/Enzyme Pytorch

Scikit-learn Flask Streamlit LATEX

# **ACHIEVEMENTS**

Completed an online course Data Analysis with Python organised by <u>Jovian.ai</u>

**Aug** 2020 - Sept 2020

Credential

Participated in 30 days of Kotlin campaign organised by Google.

**May 2020 - June 2020** 

Credential