Atin Bainada
Computer Science & Engineering
Indian Institute of Technology Bombay

190050024
UG Second Year
Male
DOB: 17/11/2002

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	8.89

Pursuing Minors in Data Science

Scholastic Achievements

- Obtained a percentile of **98.82** in Joint Entrance Exam, Advanced among **1,70,000** candidates *(2019)*
- Secured a percentile of **99.88** in Joint Entrance Exam, Main among **1.14 million** candidates *(2019)*
- Recipient of the prestigious **Kishore Vaigyanik Protsahan Yojna** (KVPY) Fellowship awarded by the Department of Science and Technology, Government of India *(2018)*

Key Projects

Red Plag *Autumn 2020*
Guide: Prof. Amitabha Sanyal — Ongoing Course Project *IIT Bombay*

- Developing a **Cloud Based** rudimentary **Plagiarism Checker** using python and creating an authentication system using **Django** for users to access the checker using pass-code
- Exploring the use of multiple fingerprinting algorithms namely, **Local** and **Winnowing** algorithms, **Karp Rabin** algorithm to calculate the **Covariance Matrix** for set of source files
- Implementing vectorization and manipulation of files using **Natural Language Toolkit** (NLTK)
- Creating an interface to visualize the data graphically using surface plots with the help **Matplotlib**
- Developing a **Command Line Interface** (CLI) for the checker using **Click** library in python

Why the hype around GAN's *Summer 2020*
Seasons of Code — Web and Coding Club *IIT Bombay*

- Created **Deep Convolutional Generative Adversarial Network** (DCGAN) from scratch using **PyTorch** framework and trained it on **CelebA** dataset on Kaggle to generate **Deepfakes**
- Implemented **Convolutional Neural Network** using **PyTorch** and trained it on **MNIST** dataset of hand written digits and achieved an accuracy of **99.2%** on the Kaggle Digit Recognizer competition

Image Processing and Graph Plotting *Autumn 2020*
Guide: Prof. Amitabha Sanyal — Course Project *IIT Bombay*

- Utilized the **KMeans++** algorithm from the python **SciPy** library to smoothen high contrast images by replacing all color vectors in an image with their **K Cluster Centroids**
- Applied linear regression on **Levitt's Metric** to predict the end of covid pandemic in India
- Plotted 2D, 3D surface plot of any continuous function and their derivatives using SciPy, Matplotlib

Food Ordering Web Application *Summer 2020*
Self Project

- Developed a food ordering **Web Application** using HTML, CSS, JavaScript and **Django**
- Used **Function Based Views** for cart, checkout pages and used **JavaScript** for add to cart feature
- Implemented an authentication system to login or register using Django **Authentication Forms**
- Created multiple Django Models to comfortably manage the app using admin page

Technical Skills

Programming Languages	Python(fluent), C, C++, LaTeX, Bash, MATLAB
Softwares & OS	AutoCAD, Bootstrap Studio, Git, SolidWorks, Ubuntu, Kali Linux
Web Development	HTML, CSS, JavaScript, Bootstrap, Django
Data Science	TensorFlow, PyTorch, Keras, Numpy, Matplotlib, Pandas

Extracurriculars

- Surpassed typing speed of **68 WPM** on Nitro Type, an online **Competitive Typing** platform *(2020)*
- Completed **Observational Astronomy** course under Math and Physics Club, IIT Bombay *(2020)*
- Participated in the **RC Plane** Competition organized by Aeromodelling Club, IIT Bombay *(2019)*