Aadish Jain   190050001

Computer Science & Engineering   UG Second Year

Indian Institute of Technology Bombay   Male

                                                   DOB: 29/11/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	9.06
Intermediate/+2	CBSE	Arcadia Academy, Kota	2019	93.00
Matriculation	CBSE	Arcadia Academy, Kota	2017	10.00

Pursuing *Honors* and *Minor* in **Applied Statistics And Informatics**

ACADEMIC ACHIEVEMENTS

- Secured **All India Rank 25** among more than 0.2 million students in IIT JEE-Advanced *(2019)*
- Secured **All India Rank 87** among 1 million students in JEE-Main exam conducted by NTA *(2019)*
- Awarded the prestigious National Talent Search Examination(NTSE) scholarship by the Government of India and stood among the **top 1000 students** from 1 million students *(2017)*
- Secured **All India Rank 223** among more than 50,000 students in the prestigious Kishore Vaigyanik Protsahan Yojana(KVPY) examination in SA stream conducted by IISc Bangalore *(2018)*

INTERNSHIPS

vCreatek Pvt. Ltd.   *Winter 2020*
Research Intern

- Developed an end-to-end solution for **Table Entailment** as a task for **SemEval 21 Tab-Fact** using **TAble PArSing (TAPAS)** model and achieved an **F1 Score of 0.92** for 2-class entailment
- Created a **Relevancy Detection Module** for deduction of table cell contribution using the **AlBERT model** for evidence finding with an **accuracy of 93%** and an F1-score of 0.68
- Completed coursework on **Recurrent Neural Networks, Deep Learning and Attention Mechanism** along woth reading of papers related to **BERT** and its different variations.

KEY PROJECTS

Review Sentiment Classifier   *Winter 2020*
Self Project

- Developed a **Sentiment Classification System** of IMDb Movie Reviews using **Keras framework** with more than 10,000 reviews and achieved an **accuracy of 88.73%** on test data
- Implemented **Bidirectional LSTMs** with Dense Layers, Flatten Layers etc., used **GloVe Word Embeddings** (200-D), analysed data using **Word Cloud visualisation** for both positive and negative reviews
- Iteratively tried altering the model by adding and removing some Dense layers, using **unidirectional LSTM**, different word embeddings and **Hyper Parameter tuning** to achieve best results

Bash Debugger   *Autumn 2020*
Guide - Prof. Amitabha Sanyal : Course Project   *IIT Bombay*

- Developed a **Terminal based Code Debugger** for **Bash** codes in python language to help user interactively debug sections of code using breakpoints placed by user
- Implemented features like **debugging a code snippet** from the file, printing variables after every change, **printing value of a variable at a given line**, etc. according to the command entered by user
- Added specific features for particular parts of the code like **setting breakpoints inside commands** like sed, debugging only a particular function, number of iterations for loops etc.

Movie Recommender System   *Summer 2020*
Online Course Project : Machine Learning   *Coursera*

- Trained a content based **Movie Recommender system** and predicted movie ratings from 0 to 5 stars using data of around 10000 movies
- Implemented **Collaborative Filtering** with **83% test accuracy** and also predicted my rating according to my interests in different movie genres
- Developed an Anomaly Detection System using **Multivariate Gaussian Distribution** and used it to detect inconsistencies in given dataset so as to make the algorithm more efficient

Other Projects

Summer of Science : Data Structures and Algorithms *Summer 2020*
Guide - Anuj Srivastava *IIT Bombay*
- Successfully completed **2 month long** self study project under the mentorship of Maths and Physics Club
- Learnt about different abstract data structures like **Heaps, Binary Search Trees, AVL trees**
- Covered basic concepts in algorithms such as **breadth and depth first search, Dijkstra's, Bellman-Ford**
- Studied about different concepts like **Dynamic programming, Hashing functions, integer arithmetic**

Institute Technical Summer Project : App development *Summer 2020*
Guide - Sudhanshu Sahil *Institute Technical Council*
- Developed an **Android Application** as a bridge between the students who want like-minded people for some kind of project, start-up, team events and those who have the required skills
- Used Android Studio software, Java programming language and **Google Firebase** as back end software
- Implemented different features like **user authentication, database management**, managing posts added by users, searching for specific people or events, app analytics and many more

Fake News Classifier *Winter 2020*
Self Project
- Developed a content based **Fake News Classifier** in PyTorch framework using data of more than 1000 news articles and achieved an **accuracy of 85.84%** on test data
- Implemented **Sequence Modelling** using **Bidirectional LSTMs** with Linear Layers and Dropout Layers, used inbuilt vocabularies in **PyTorch** for word embeddings

Spam E-mail Classifier *Summer 2020*
Online Course Project : Machine Learning *Coursera*
- Trained a **Spam classifier** model and predicted whether an e-mail is a spam using data of 4000 e-mails
- Implemented **Support Vector Machine** for both linear and non-linear Decision boundary classification and achieved **98% test accuracy** on test data of 1000 e-mails
- Used **Gaussian Kernel** in SVM for feature selection in the case of non-linear decision boundary

Positions of Responsibility

Teaching Assistant | Computer Programming and Utilization *November 2020-Present*
Guide : Prof. Bhaskaran Raman *IIT Bombay*
- Responsible for conducting regular theory interaction sessions and lab sessions every week
- Teaching, Evaluating and clearing doubts of students, providing feedback to the instructor in-charge

Courses Undertaken

Computer Science	Machine Learning by Stanford University*, Data Structures and Algorithms + lab, Discrete Structures, Data Analysis and Interpretation, Abstractions and Paradigms in Programming + Lab, Computer Programming and Utilization + Lab, Software Systems Lab
Mathematics	Calculus, Linear Algebra, Introduction to Probability Theory
Others	Basics of Electricity and Magnetism, Quantum Physics and Application, Physical Chemistry, Organic and Inorganic Chemistry, Biology

*Completed on Coursera in 2020 summers

Programming Skills

Languages	C, C++, Java, Python, MATLAB, Bash
Tools	Android Studio, Git, PyTorch, Keras, LaTeX, NumPy, SciPy, Pandas, Matplotlib, Octave

Extracurricular Activities

- **Mentored 25 school students** of class 11th and 12th for JEE preparation during COVID-19 pandemic crisis one-to-one in the absence of a proper mentor for them under CovEd India *(2020)*
- Completed 80 hours under **National Service Scheme**, IIT Bombay under **Educational Outreach** program teaching underprivileged students of class 5th to 8th *(2019-20)*
- Secured **2nd position** among 300 Science Models in **State level Science Model Competition** *(2014)*
- Stood **1st in District level cricket tournament** while representing my school among 20 schools *(2013)*