ABHISHEK NARAYAN CHAUDHURY
Industrial Engineering & Operations Research
Indian Institute of Technology Bombay

19I190005
M.Sc.
Gender: Male
DOB: 21-09-1996

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2022	8.86
Graduation	Calcutta University	Ramakrishna Mission Residential College	2018	66.17%
Graduation Specialization: Mathematics				

EXPERIENCE

IIT Bombay, Placement Office — *Internship Coordinator*

Sep 2019 - Jun 2020

Managed the internship process during 2019-20 with a group of **35 students for 1500+** students across different departments and courses.

Teaching Assistant, IEOR Department

July 2021 - Dec 2021

Responsible for evaluation of assignments & answer scripts, organizing crib sessions to address issues of **50+ students** for the IE 507 Modelling Lab.

PROJECTS

Automated Deep Learning method for Covid Detection

(ME781: Statistical Machine Learning and Data Mining, Aug'20-Dec'20) Guide: A.Tiwari

- Considered **2-D CTScan image for pre-processing features normalized** as per our model parameters requirements for Lung Segmentation and Image Analysis.
- Used pretrained DenseNet model based on the CT Scan Image analysis.

Lottery Ticket Hypothesis

(IE643:Deep Learning - Theory and Practice, Aug'20-Dec'20) Guide: P Balamurugan

- Substantiated the existence of a **significantly pruned network** having comparable accuracy with original network in LeNet and FCC networks.
- Considered the plausibility of **transfer learning of the lottery tickets** obtained from one dataset to another dataset from the same distribution.

HyperBand: A Novel Bandit Based Approach to Hyperparameter Optimization

(IE613: Online Learning, Jan'21-May'21) Guide: M.Hanawal

- Reviewed literatures on bandit problems in context of Hyperparameter Optimization
- Implemented HyperBand, an improved version of Successive Halving,a solution to the Non-stochastic best arm problem, for finding optimal **Hyperparameter configuration**

High Dimensional Time Series Forecasting

(IE689, MSc-PhD Project I, Aug'20-Dec'20) Guide: N.Hemachandra

- Studied the main **issues faced during modeling high dimensional time series** forecasting models, like the correlation between different features, upper bounds of different statistical quantities.
- Performed **comparative analysis of different forecasting models** for high dimensional time series forecasting and found DeepGLO methods perform better than DeepAR and LSTM methods in the un-normalized setting

Fake news propagation and Branching processes

(IE692 MSc-PhD Project II, Jan'21-May'21) Guide: V.Kavitha

- Considered an **Online Social Network** with controlled warning mechanism to deal fake news, without affecting authentic news and studied the effect of reluctant users that refuses to participate in the warning synthesis.
- Observed with Monte-Carlo simulations that with **20% of reluctance factor, there is 10% rise in the extinction and 0.06 increase** in the fraction of people with real tag thus highlighting the effectiveness of the mechanism

CERTIFICATIONS

- **Machine Learning** (*Coursera Jul'21*)
- **Applied Text Mining in Python** (*Coursera Jul'20*)
- **Text Mining and Analytics** (*Coursera Sep'20*)

AWARDS

INSPIRE Scholarship for securing among the top 1% in Boards

Secured 33 rank in the IIT entrance exam for MSc among 12000+ students.

Selected in the ISI QMS programme for securing top rank in the ISI entrance exam

SKILLS

Programming Languages:

Python (Advanced) (Tensorflow, Pytorch,Flask), SQL, R, HTML, CSS, ReAct

Mathematical Software:

Matlab, AMPL (Gurobi), AnyLogic.

Academic:

Statistics (Advanced), Machine Learning, Applied Probability , Time-Series Forecasting , Deep Learning, Bandit Algorithms Image Processing

LANGUAGES

Bengali, English, Hindi

LEARNING

Completed training on Data Analytics with R-programming at ECell,IIT Bombay