



Subhadeep Chaudhuri  
Industrial Engineering & Operations Research  
Indian Institute of Technology Bombay

19I190010  
M.Sc.  
Gender: Male  
DOB: 28-10-1998

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2022	9.36
Graduation	University of Calcutta	St. Xavier's College, Kolkata	2019	8.4
Graduation Specialization: Statistics				

## SCHOLASTIC ACHIEVEMENTS

- Secured **Department Rank 1** in M.Sc., Industrial Engineering and Operations Research (Batch of 2019-2022)
- Recipient of **INSPIRE scholarship** from Dept. of Science & Technology, Govt. of India for the period 2016-2019
- Awarded **AP grade (3 out of 189 students)** in Statistical ML & Data Mining for **exceptional** overall performance

## PROFESSIONAL EXPERIENCE

**Innovaccer** | Data Science Intern (Received PPO for commendable performance) | May - July, 2021

**Keywords:** Risk Analytics, Risk Identification, Predictive Analytics

**Tools:** Python 3, Dask, Sklearn

**Objective:** To ascertain individuals with rising risk of ailment, requiring greater healthcare needs and higher expenditure

- Established a **pipeline of data cleaning, EDA and feature extraction** (existing & derived) from raw data of patients
- Developed an **Ensemble Classifier** model for classifying patients with **rising risk**, ready for deployment to production

**Data Sutram** | Data Science Intern

| August, 2020

**Keywords:** Location Intelligence, Customer Identification, Geospatial Queries

**Tools:** Python 3, Sklearn

**Objective:** Theoretical modeling and interpretation of KPI using client data + in-house curated location intelligence data

- Formulated **theoretical model** to estimate **expected sales potential** of a location and drive analysis-based **decision**
- Implemented XGBoost Classifier to identify & **categorize potential target customers** for improving client **revenue**

## ACADEMIC PROJECTS

**Machine Learning Based Matchmaking**

| Aug - Dec, 2020

Course Project: Statistical ML & Data Mining | Guide: Prof. A. Tewari

- Ideated a **start-up** delivering ML-based product (match-making for dating leveraging psychology) for B2C market
- Implemented **neural network** model to predict **similarity** based on **Big 5 personality traits** in behavioural analysis
- Built **interface** (front end) for user data collection • Handled **project management** using GANTT & RASIC charts

**Deep Learning for NLP : Bengali-English Translation using XLNet**

| Jan - May, 2021

M.Sc. Phase-II project | Guide: Prof. P. Balamurugan

- Reviewed existing NLP models like BERT & XLNet • Started working on **Language Model** for **Bengali** using XLNet
- Developed **interface** (front end) to collect **user translations** from Bengali to English for model training & fine-tuning
- Built the **corpus of Bengali tokens**, using the SentencePiece tokenization scheme, using **~10M** sampled sentences

**The Lottery Ticket Hypothesis: Training Sparse, Trainable Neural Networks**

| Aug - Dec, 2020

Course Project: Deep Learning - Theory & Practice | Guide: Prof. P. Balamurugan

- Substantiated existence of significantly (**>85%**) pruned networks having **comparable accuracy** with original network
- Inspected the plausibility of **transfer learning** lottery tickets obtained from a dataset to another of the same domain

## KEY COURSES/SKILLS

**Language/ Software** • Python • R • SQL • AMPL • Scilab • Minitab • AnyLogic • LaTeX • MS-PowerPoint

**Python Libraries** • NumPy • Pandas • Sklearn • SciPy • Seaborn • Matplotlib • Plotly • PyTorch • TensorFlow

**Machine Learning** • Deep Learning-Theory & Practice • Statistical ML & Data Mining • Online Machine Learning

## POSITIONS OF RESPONSIBILITY

**Department Coordinator** | Institute Student Companion Program, 2020-2021

| IIT Bombay

- Coordinated the department level **e-orientation** program • **Mentored** 6 new entrants of IEOR (M.Sc.) over the year

**Director (Grounds)** | Xavotsav 2018

| St. Xavier's College, Kolkata

- Led a team of **40 students**, managing **10,000+ visitors** over 3 days at Xavotsav '18, the annual fest of SXC, Kolkata

## EXTRACURRICULAR ACTIVITIES

**Sports**

- Winners** in **Table Tennis** PG General Championships, 2019-2020 | **Team IEOR** member
- Finished 3<sup>rd</sup>** in Inter-Hostel **Football** General Championships, 2019-2020 | **Team Tansa House**

**Social Outreach**

- Taught 30 underprivileged children over 4 days under **NSS Social Visits** from SXC, Kolkata