

# Ishi Singhal Metallurgical Engineering and Materials Science Indian Institute of Technology Bombay

210110051 B.Tech.

Gender: Female DOB: 12/10/2003

Examination	University	Institute	Year CPI / %
Graduation	IIT Bombay	IIT Bombay	2025

Pursuing a Minor Degree in Artificial Intelligence and Data Science offered by C-MInDS department, IIT Bombay

### SCHOLASTIC ACHIEVEMENTS

Secured International Rank 27 in the International Math Olympiad conducted by SOF

Jun 2021

Achieved 99.19 percentile in JEE Mains among 1.18 million candidates nationwide

Sep 2021

#### PROFESSIONAL EXPERIENCE

# Data Science Intern | Urban Company

May 2023 - Jul 2023

*India's pioneering unicorn in the home services sector* 

- Analyzed company data to identify parameters indicating intent of a lead to join as a service professional
- Prepared an extensive data set of leads, encompassing over 120 features using SQL
- Leveraged feature importance analysis and partial dependence curves to isolate 17 key features
- Developed a lead scoring model using Random Forest algorithm, thereby boosting agent productivity by 4x

# Product Research Intern | Tavaga Advisory

Dec 2022 - Jan 2023

SEBI registered Investment Advisor

- Formulated a comprehensive SWOT Analysis and Go-To Market Strategy for the robo-advisory at Tavaga
- Researched and built a detailed case study on Investment Advisories in India, including a competitor analysis
  to gain insights and identify areas for differentiation and growth opportunities

### **POSITIONS OF RESPONSIBILITY**

# **Department Academic Mentor**

May 2023 - Present

Metallurgy and Material Science Department, IIT Bombay

- Mentoring 6 sophomores from the MEMS department on a one-to-one basis on various aspects of their life
- Part of the Events subgroup in the D-AMP council in charge of conducting events that cater to the academic and career needs of 300+ undergraduate students from the MEMS department

#### **PROJECTS UNDERTAKEN**

### **Text Generation Using General Adversarial Networks** | Self Project

Jul 2023

- Implementation of the research paper "Adversarial Text Generation Without Reinforcement Learning" by Donahue, D., & Rumshisky, A.
- Applied Wasserstein GANs and traditionally used attention based RNN for text generation, training the model on a Wikipedia movie plot dataset

#### **Algorithmic Venture Capital** | Self Project

Jul 2023

- Built a model that predicts the valuation step up multiple in the subsequent financing round of companies
- Implemented a 10 layer fully connected neural network, a Random Forest and a Linear Regression model and found Random Forest to be the best with an **MSE** of **1.1**

# Stock Market Price Prediction | Self Project

Jun 2023

- Developed a deep learning stock price prediction model leveraging LSTM model for time series analysis using NumPy, Pandas, Matplotlib and Keras (Tensorflow)
- Enhanced forecast accuracy using feature engineering, incorporating the S&P 500 index and interest rates

### **Sentiment Analysis** | Self Project

May 2023

- Built a sentiment analysis model classifying tweets as positive or negative sentiment using NLP concepts such as tokenization, stemming, Bag-of-Words and TF-IDF
- Built various models like Logistic Regression, XGBoost and Decision Trees and found Logistic Regression in combination with TF-IDF to be the best with an F1 score of 0.59

# **Scalable K-Means by Ranked Retrieval** | Course Project | Prof. Biplab Banerjee

Apr 2023

- Reviewed ACM Conference paper presenting novel K-Means algorithm for significant computational speedup
- Performed a comprehensive literature review on the **Weighted AND** algorithm and its unique ranked retrieval approach to effectively classify large datasets with a significant number of features (of the order of 10 million)