



Ajinkya Vinod Bobde
Mechanical Engineering
Indian Institute of Technology Bombay

200040014
B.Tech.
Gender: Male
DOB: 21/11/2002

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	

Pursuing a Minor degree in Artificial Intelligence and Data Science in C-MInDS [Minor CPI : 9.5]

SCHOLASTIC ACHIEVEMENTS

- Secured merit-based **Branch Change** (10% out of 1000+ students) to Mechanical Engineering [2021]
- Recipient of the Kishore Vaigyanik Protsahan Yojana (**KVPY**) Fellowship by **Govt. of India** [2019]
- Achieved **99.79** percentile in **JEE - Mains 2020** among more than 1 million aspirants across India [2020]
- Ranked **National Top 1 %** of performers in **NSEA**(National Standard Examination in Astronomy) [2020]

KEY PROJECTS

Emojify | Face Detection and Emoji Maker [Aug '21 - Nov '21]

Course Project | Guide: Prof Biplab Banerjee

- Designed a **CNN(Convolution Neural Network)** to recognize facial emotions using **Deep Learning**.
- Utilized **OpenCV** to detect the bounding boxes of the face in the webcam and predict the facial emotions.
- Explored and used **keras, Tensorflow, h5py and dlib** libraries for training and prediction in the model.

Algorithmic Trading [May '22 - June '22]

Self Project

- Studied **Candlestick** chart patterns and different trading styles such as **Intraday and Swing trading**.
- Performed analysis using indicators such as moving average, **bollinger bands** and relative strength index.
- Implemented and backtested various strategies such as trend following and mean reversion using a variety of technical indicators on the top 10 companies by market cap in **Python** using the **Backtrader** library.

Analysis and Prediction of Premier League Matches [Aug '21 - Nov '21]

Course Project | Guide: Prof M Hanawal, A Sethi, S Sarawagi

- Automated data cleaning of web-scraped data present in HTML format using **BeautifulSoup**.
- Analyzed particular team qualities and displayed key match insights using **SeaBorn and Matplotlib**.
- Predicted match outcomes using **Random Forest, Naive Bayes and Neural Networks**.

Summer of Science | Data Structures and Algorithms [Apr '21 - Jun '21]

- Made a File Zipper Using **Huffman Coding Algorithm** for compressing and decompressing files.
- Created a Map navigator based on **Dijkstra Algorithm** by finding the shortest path between nodes.
- Learned working of **React** which uses **BFS and DFS** and compares virtual and real **DOM**.

POSITIONS OF RESPONSIBILITY

Junior Design Engineer | Aerodynamics subsystem | IITB Racing [Jan '22 - Jun '22]

- Optimized aerodynamic components using Computational Fluid Dynamics simulation in **Simscale**.
- Manufactured the aerodynamic components to represent in **Formula Student UK and Formula Bharat**

Teaching Assistant | Department of Physics, IIT Bombay [April '22 - July '22]

- Responsible for tutoring a batch of **40+** freshmen for the course of **Basics of Electricity and Magnetism**
- Assisted students by solving doubts in tut sessions; evaluating quizzes worth **90%** of the course grade.

Mentor | Summer of Science, IIT Bombay [May '22 - July '22]

- Mentored students for the topic of **Gravitational Wave Astronomy** in Summer Of Science

EXTRA-CURRICULARS AND SKILLS

TECHNICAL	<ul style="list-style-type: none">Programming Languages - C, C++, Python, LATEX, HTML, CSSSoftwares- Solidworks, Autocad, Simscale, Git, Excel, Octave, ANSYS, MatlabFrameworks- Pytorch, Scikit-Learn, Pandas, Numpy, Keras, Tensorflow, OpenCv
SPORTS	<ul style="list-style-type: none">Secured 1st place in district level Squash Tournament and selected for state level.Actively involving in trekking and climbed 14+ peaks including Kalsubai(1646m)
CULTURAL	<ul style="list-style-type: none">Was Marketing Coordinator for Mood Indigo and Media Coordinator in TechfestPerformed in Open Mic Conducted by Symphony, IITB (Music Club of IIT Bombay)