Akash Vivek Chodankar **190100009**

Mechanical Engineering **B.Tech.**

Indian Institute of Technology, Bombay **Gender: Male**

DOB: 23-05-2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	

Pursuing Dual **Minors** in **Data Science** and **Computer Science and Engineering**

SCHOLASTIC ACHIEVEMENTS

- Amongst the top **1.6%** students in IIT-JEE Advanced 2019 taken by more than **0.2** million candidates
- Received the **Science Talent Search Scholarship** given by **Government of Goa** for **5** consecutive years
- Felicitated by the **Indian Medical Association** for exemplary performance in the **S.S.C** exam 2017

KEY PROJECTS

Analysis of Face Recognition Techniques | Course Project *March 2021 - May 2021*
Guide: Prof. Abir De, Course: Introduction to Machine Learning
- Performed a comparative analysis of AI algorithms for facial recognition of **39** subjects under varying illumination
- Implemented & compared various architectures like **SVM, FFNN, CNN** to achieve an accuracy of over **85%**
- Improved the accuracy to a remarkable **95%+** using feature extraction techniques like **PCA** and **VGG16**

NLPlay with Transformers | Seasons of Code *April 2021 - July 2021*
Web and Coding Club, IIT Bombay
- Explored text processing for **sentiment analysis** on IMDB movie reviews dataset using the **NLTK** library
- Deployed various NN architectures like **FFNN, RNN and LSTM** in **PyTorch**, achieving an accuracy of **80%+**
- Improved the accuracy to over **85%** by fine-tuning **BERT** and **DistilBERT** models using **HuggingFace** library
- Generated **30** articles with over **2000** words each, across domains, using **transformer** models like **GPT-2** and **T5**

Stock Market Analysis | Summer of Science *April 2020 - June 2020*
Maths and Physics Club, IIT Bombay
- Studied financial statements with an overview of **Porter's five forces** to analyse their role in **value investing**
- Gained an understanding of **technical analysis** tools such as **OBV**, accumulation/distribution line and **MACD**

Quantum Computational Workshop *August 2020*
Maths and Physics Club, IIT Bombay
- Learned about the fundamentals of **quantum gates** and **circuits** and implemented them using IBM's **Qiskit**
- Implemented the **Deutsch-Jozsa** deterministic algorithm to solve **Deutsch's** problem, explored **Grover's quantum search** algorithm and executed the **BB84** protocol for quantum **encryption** and **decryption** of a message

TECHNICAL PROFICIENCIES

- **Programming Languages**: C, C++, Java, Python, R, HTML, CSS, JavaScript
- **Software Packages**: Git, SolidWorks, Microsoft Excel, LaTeX, AutoCAD, CAMotics, CNC Simulator, Qiskit

POSITIONS OF RESPONSIBILITY

Team Member | Data Analytics and Visualization Team *July 2021 - present*
Undergraduate Academic Council, IIT Bombay
- Selected as one amongst the **11** members out of **70+** applicants based on an analytical assignment and interview
- Responsible for producing formal and informal reports by analyzing **institute data** & data from other sources

Department Academic Mentor | IIT Bombay *May 2021 - present*
Handpicked for DAMP (1/37 out of 137 applicants) based on an extensive interview and peer reviews
- Mentoring **7 sophomores**, actively involved in bridging the student-faculty gap and making students' academic experience better by updating **blogs about the mechanical department** and **writing course reviews**

Coordinator | Entrepreneurship Cell, IIT Bombay *June 2020 - March 2021*
Asia's largest entrepreneurship promoting body by NEN | Patronage from UNESCO
- Involved in the ideation of EnB Crusades- a **start-up mentoring** and **funding** program with **50+** start-ups
- Assisted in organising TTMM, an **on-spot fundraising** platform for start-ups and the first edition of SeedStars

EXTRACURRICULAR ACTIVITIES

- Participated in a team of 4 amongst 15+ groups for programming an **obstacle avoiding nano drone**
- Achieved a **FIDE** rating of 1241 by participating in **state** and **national level** open chess tournaments
- Successfully completed **The Bharat Scouts and Guides** syllabus prescribed for scouting