

Currently pursuing a **Minor** Degree in **AI and Data Science** from CMInDS, IIT Bombay; perfect **10.0 CPI**

SCHOLASTIC ACHIEVEMENTS

- Awarded a change in branch from **Chemical** to **Mechanical** for displaying exemplary academic performance (2021)
- Secured **99.28** percentile in JEE Advanced and **99.85** percentile in JEE Mains amongst 1+ million aspirants (2020)
- Felicitated for being the **School topper** in Science Stream in the class XIIth CBSE board examinations (2020)
- Secured International Rank **4** in the 11th National Interactive Maths Olympiad amongst **100+** candidates (2016)

PROFESSIONAL EXPERIENCES

Associate Data Scientist Intern | NoBroker Technologies Solutions Pvt. Ltd. (May '23 - Jul '23)

*Worked on implementing **text-to-speech** synthesis and voice cloning models like Natural Speech, VITS, YourTTS*

- Developed text-to-speech model that can replace **50+** customer care executives with voice bot for automated messages
- Implemented **VITS** model to generate **human sounding speech** of a company agent based on the input text
- Employed **Speaker Manager** API class for diverse Multi-Speaker voices; used **YourTTS** model for **5+** speakers
- Performed **voice cloning** with the pretrained model, facilitating precise voice mimicry without the need for retraining

Software Development Intern | Benthon Labs Pvt. Ltd. (May '22 - Jul '22)

*Received an **LOR** for my exemplary performance and contributions; Part of a **5 Membered Team** in ML department*

- Designed and created a responsive & dynamic webpage utilizing the **Ionic** framework integrated with **React JS**
- Utilized **Postman** for ML model-detected images through **API** calls and integrated **Auth0** for secure UI login
- Built a **resume parser** to predict the category; achieved an accuracy of **0.98** using **Random Forest Classifier**

Data Analyst Intern | Tech Mahindra Business Services (Nov '21 - Jan '22)

*Part of a **12 Membered Team** in **Fraud and Security** department catering to multiple transactions*

- Analysed **20+** reports using **SQL** and **MS Excel** to gain a better understanding of **5+** key performance indicators
- Worked with **0.3M+** data of sales and revenue with **250+** features and highlighted areas of concern to detect fraud
- Developed analytical approaches, including **database queries**, actionable reports, and interactive **data visualization**

KEY PROJECTS

Learn to Cartoonize | Seasons of Code | Web and Coding Club, IIT Bombay (May '22 - Jul '22)

Initiative by Institute Technical Council, IIT Bombay to dive into coding during summer break

- Implemented **gradient descent** from scratch, unlocking parameter optimization for superior fitting line precision
- Conceptualised and designed **multi-layer perceptron** and **CNN** models, all crafted from scratch using **PyTorch**
- Explored **GANs** for generating new and synthetic instances of data matching with the distribution of real data

Stock Market Technical Analysis | DS303 Course Project | Prof. Biplab Banerjee (Apr '22 - May '22)

Part of a team of four students implementing various models and working on the complete analysis of APPL stock

- Comprehended the moving average **technical indicator** in the stock market and implemented it in **5+** models
- Achieved the mean squared error (MSE) of **5.49** by implementing Long Short Term Memory (**LSTM**) model
- Obtained the best result using Autoregressive integrated moving average (**ARIMA**) model with an MSE of **2.72**

Language Detection | Seasons of Code | Web and Coding Club, IIT Bombay (Mar '21 - Jul '21)

Initiative by Institute Technical Council, IIT Bombay to dive into coding during summer break

- Leveraged **EasyOCR** library to detect text from images and precisely predict its language with ease
- Used Natural Language Processing (**NLP**) for preprocessing the dataset of English, Hindi and Korean languages
- Implemented **Naive Bayes Classifier** to train and classify one of the 3 languages, achieving an accuracy of **91%**

Chatbot Using Deep Learning | Self Project (Jan '22 - Feb '22)

An interactive retrieval based chatbot capable of communicating and performing actions similar to a human

- Developed a Python-based chatbot, integrating cutting-edge LSTM model from scratch for **15+ intents** classification
- Trained chatbot on rich dataset, enabling intelligent, contextually appropriate responses with retrieval-based techniques
- Demonstrated strong proficiency in NLP, showcasing expertise in **NLTK**, **Keras** and advanced Python programming

IPL Analysis and Winner Prediction | DS203 Course Project | Prof. Amit Sethi (Sep '21 - Nov '21)

Part of a team of three students working on an analysis and winner prediction model for Indian Premiere League

- Conducted comprehensive analysis of **more than a decade** of IPL using match by match and ball by ball dataset
- Experimented with combinations of **5+** features for predicting a match's outcome based on feature importance scores
- Implemented **5** models for winner prediction; achieved the best accuracy of **89%** with Decision Tree model

OTHER PROJECTS AND RESEARCH

Value vs Growth vs Thematic Investing | FinSearch | Finance Club, IIT Bombay (May '21 - Jul '21)

A research-driven program to enhance financial knowledge involving three types of investment

- Worked in a team of **4** to explore different investment strategies by performing fundamental and technical analysis
- Applied strategies to the **Indian Stock Market** by creating portfolios, analyzing the pros and cons of each strategy
- **Back-tested** and reviewed the portfolios to suggest the **best strategy** one for different time-frames and conditions

Restro - Menu Optimization | ME308 Course Project | Prof. Makarand Shrikrishna Kulkarni (Jan '23 - Apr '23)

Part of a team of four students to plan menu for a restaurant for maximizing profit and customer satisfaction

- Crafted **Linear Programming** solution for combo meals and optimizing restaurant profits with **3+** constraints
- Implemented web scraping for **8+** cuisines and **10+** restaurants, collecting data on **5+** features of menu items
- Pitched the model to **200+** people & **50+** restaurant owners, gathering valuable insights & feedback for refinement

Lasso Game | Course Project | Prof. Bhaskaran Raman (Jan '21 - Feb '21)

Basics of Game Development using C++ in Computer Programming and Utilization (CS101)

- Elevated the lasso game, delivering an improved version that captivates players with its remarkable enhancements
- Improved the game with the help of **700+** lines of code by introducing various scores for different coloured tokens
- Handled the overall net score of the user; received perfect **10** grade, one of the **21** students out of **335** in the course

POSITIONS OF RESPONSIBILITY

Genre Captain | Dramatics | Inter IIT Cult Meet 5.0, IIT Madras (Oct '22 - Jan '23)

- Led **80+** students across 4 competitions, ensuring smooth operations while handling a total budget of INR **0.1M**
- Earned the **overall First Runner-up** title as a part of **15-member** core team leading **240+** students
- Secured the first position in Stage Play and the second position in Mime amongst more than **20** participating IITs

Academic Mentor | Department of Mechanical Engineering, IIT Bombay (May '22 - Apr '23)

- One of the **43** mentors selected from **140** applicants through a procedure consisting of peer reviews and interviews
- Mentored **6** sophomores, fostering support to efficiently manoeuvre academic load and actively address social needs
- Part of events subgroup, responsible for conducting various events within the department throughout the year

Teaching Assistant | Engineering Drawing, ME119 | Prof. B. Ravi (Mar '22 - Jul '22)

- Assisted the professor in the smooth conduct of the course having **190+** students by moderating the weekly labs
- Graded lab sheets, addressed students' doubts, and provided unwavering guidance throughout the course duration

Convener | Fourthwall | Institute Dramatics Club, IIT Bombay (Jun '21 - Apr '22)

- Proposed budget of INR **50k+** for recording self-written plays during pandemic; achieved **1st** place in Mood Indigo
- Collaborated with actors **Mr. Mukesh Khanna** & **Mr. Dalip Tahil**, increasing club participation by **100%** y-o-y
- Funneled internship and placement opportunities in **The Viral Fever** for **30+** institute students in acting & writing
- Organized AnnProd showcasing **8** plays & managing a team of **100+** students and handled the budget of INR **0.2M**

TECHNICAL SKILLS

Programming	C++, Python, SQL, HTML, CSS, React, Ionic
Software & Tools	L ^A T _E X, Microsoft Office, AutoCAD, Premiere Pro, Photoshop, Illustrator
Libraries	Pytorch, Tensorflow, Keras, OpenCV, Scikit-Learn, Seaborn, Numpy, Pandas, Nltk

EXTRACURRICULAR ACTIVITIES

- Participated in **Agra Intercontinental Diplomatic Conclave** (AIDC) along with **500+** other delegates (2018)
- Secured **1st** position in Online Writography and Poetry competition amongst **50+** participants nationwide (2020)
- Stood **1st** in Actomania - Mimicry Competition conducted by Fourthwall, the Dramatics Club of IIT Bombay (2020)
- Obtained **1st** position in 'TBO Open Mic' Online Poetry Competition amongst **50+** entries on Instagram (2020)
- Earned **3rd place** in the sports quiz at **Freshiesta**, competing against **30+** teams institute-wide (2021)
- Completed a year-long training in Dramatics under **NSO Culturals** and learnt about Meisner technique (2021)
- Led the team in SPGC, MDGC, Short Film GC; secured **Culturals Cup** among **10+** hostels after 10 years (2023)
- Recipient of the prestigious '**Person of the Year**' award for exceptional cultural contributions in the hostel (2023)