



Aditya Rajesh Agrawal
Mechanical Engineering
Indian Institute of Technology Bombay

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B.Tech.
Gender: Male
DOB: 06/04/2002

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

PROFESSIONAL EXPERIENCE

Data Science Intern | EXL SERVICE | GENERATIVE AI IN SPORTS

[May '23-Jun '23]

Awarded Letter of Recommendation from Product Manager of the project for exemplary performance and analytical skills

- Explored Generative AI and researched over 60 ChatGPT Plugins, and documented their use cases within sports domain
- Created 20+ seed data pairs including natural language text, metadata, & corresponding SQL output for training purposes
- Engineered prompts and utilized OpenAI's GPT-3.5-Turbo model to generate seed data based on input prompt and data
- Worked on an LLaMA-based framework for effortless conversion of complex Natural Language queries into SQL queries

TECHNICAL PROJECTS

Stock Market Price Prediction | SEASONS OF CODE | WNCC | IIT BOMBAY

[May '22-Jul '22]

Collected Reliance and ICICI Bank data from Yahoo Finance to build a machine learning model that predicts stock market prices

- Implemented Augmented Dickey Fuller test to check stationarity of the data and resolved it using first-order differencing
- Visualized predicted & real stock prices using ARIMA and LSTM, neural network-based model using 30 days look-back period

Movie Recommendation System | COURSE PROJECT | PROF. ASIM TEWARI

[Sep '22-Nov '22]

Worked in a team of 5 to develop a content-based movie recommendation system by leveraging the TMDB 5000 movies dataset

- Employed various NLP techniques like tokenization, stop words removal, and lemmatization to enhance model performance
- Utilized scikitlearn's TF-IDF Vectorizer and implemented cosine similarity to deliver personalized movie recommendations

Bulldozer Price Prediction | SELF PROJECT | MACHINE LEARNING

[Jun '22-Jul '22]

Trained the model on Kaggle dataset with more than 0.4 million entries to predict the price of bulldozers

- Applied the Random Forest Regressor model and achieved an initial R Squared score of 74% on the final predicted values
- Elevated the R Squared score further to 91% by adeptly implementing hyperparameter tuning using RandomizedSearchCV

KEY PROJECTS

Metro Station Location Optimization | COURSE PROJECT | PROF. AVINASH BHARDWAJ

[Feb '23-Apr '23]

Spearheaded a team of 3 to analyze the current operational 3 Mumbai metro lines and proposed optimized stations along the lines

- Accounted for factors like traveling distance and regional population, creating a distance matrix with over 1000 entries
- Optimized station allocations by formulating and solving the intricate Linear Programming model using AMPL software

Computer Vision | MATHS AND PHYSICS CLUB | IIT BOMBAY

[May '22-Jul '22]

Reading project as a part of the Summer of Science program, consisting of exhaustive research and report documentation

- Delved into important ML concepts like Linear Regression, Classification, SVMs, Decision Trees, and Ensemble Learning
- Designed, trained, and achieved 98.2% accuracy in handwritten digit recognition using a CNN model on the MNIST dataset

POSITIONS OF RESPONSIBILITY

Design Secretary | MECHANICAL ENGINEERING ASSOCIATION

[May '22-Mar '23]

Selected as a part of an 11-member team based on ethical assessments, peer reviews, and rigorous interview process

- Oversaw creative graphics and skillfully aided in management of 12+ events annually with a budget of 0.3million or more
- Coordinated with the chief editors and witnessed a 100% y-o-y increase in the follower count on MEA's Instagram handle

Teaching Assistant | ENGINEERING GRAPHICS & DRAWING | PROF. B.RAVI

[Mar '22-Jun '22]

- Guided more than 15 students during lab sessions, facilitating issue resolution and clarifying students' doubts effectively
- Leveraged AutoCAD proficiency in delivering tailored solutions to student lab problems, catering to more than 160 students

EXTRA CURRICULARS

SCHOLASTIC	<ul style="list-style-type: none">Secured 99.4 percentile in Joint Entrance Examination Advanced out of 0.15 million+ aspirants ['20]Secured 99.91 percentile in the Joint Entrance Examination Mains out of over 1.2 million aspirants ['20]
YOUTUBE	<ul style="list-style-type: none">Acquired 5 million+ video views and 15k+ subscribers on my YouTube channel named-Aditya Here ['22]
SPORTS	<ul style="list-style-type: none">Awarded as "The Best Trainee" among 50+ players at summer cricket camp by Jain Irrigation systemsAwarded as "The Best Emerging Player" out of 100+ participants in Amalner Premiere League-cricket
SKILLS	<ul style="list-style-type: none">Python, SQL, Pandas, Numpy, Matplotlib, Scikit-Learn, MS Excel, Google Colab, Jupyter Notebook