



Aditya Rajesh Agrawal
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B.Tech.
Gender: Male
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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