

M SAI TANUSHA

Roll No.: IMH/10024/19

IMSc - Mathematics & Computing

Birla Institute of Technology, Mesra

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[GitHub Profile](#)

[LinkedIn Profile](#)

EDUCATION

•Integrated MSc in Mathematics & Computing

2019 - Expected 2024

Birla Institute of Technology, Mesra

CGPA:- 8.51

EXPERIENCE

•GraphML Intern | [Report](#)

June - July 2023

Zenteiq Edtech - Indian Institute of Science, Bangalore

On-site

- Conceptualized, devised, and executed intricate 10+ graph database schemas on ArangoDB by dummy data collection, strategically enhancing query efficiency & significantly improving fidelity of data analysis by 40%.
- Devised an interactive frontend to analyze customer click-through rates for 10+ courses. Presented the result in the user friendly format such as graphs, sections & other visual aids.
- Integrated seamlessly via PyArango and PostmanAPI, while overseeing graph database CI/CD pipeline.

•Summer Research Intern | [Report](#) | [LoR](#)

May - Jul 2022

Indian Institute of Technology, Ropar

Remote

- Researched papers highlighting optimization of derivatives of graph structures like spanning cactus problems and its complexities for traffic estimation applications.
- Actively collaborated with 2 team members under the mentoring of Prof. Dr. Arti Pandey.

PROJECTS

•Flight Price prediction | [GitHub](#)

Sept 2023

Deployed an end to end machine learning project via Heroku

- Developed an end-to-end Machine Learning application using RandomForest Regressor with a R-Squared error of 0.8 to estimate flight ticket prices within India.
- Followed the complete Machine Learning life-cycle, including data collection, pre-processing, feature engineering & model training. Devloped a web-application in Python and deployed on Heroku.

•Sales Forecasting | [GitHub](#)

Oct 2022

Detail furniture product forecasting using Time Series analysis

- Constructed and improved sales forecasts by analyzing the market conditions using a 4-month Time Series model.
- Applied the ARIMA and ETS models to the dataset, thoroughly analyzing their performance and errors.
- Generated forecasts with over 90% accuracy & 95% confidence interval for upcoming periods.

ACHIEVEMENTS

•STCS Vigyan Vidushi Summer School

Onsite

Tata Institute of Fundamental Research, Mumbai

Jul 2022

- A comprehensive 2 week foundational program for women in science, covering essential courses in Probability, Introduction to Machine Learning, and Game Theory with applications to industrial research.

•Scaler HackX Hackathon | [GitHub](#)

Sept 2021

Scaler Academy by InterviewBit

- 9th winner of Scalar HackX Hackathon 2021 out of 300+ teams under Financial fraud detection sector.
- Applied fuzzy logic in finance transactions to encounter fraud, focused on recognising patterns, detection, and categorization with membership functions for insights.
- 15 transaction test cases operating on 6 concepts and 12 rules for swift decisions.

SKILLS

Languages: Python, MySQL

Analysis Tools : Matplotlib, Pandas, Numpy, Seaborn, MS Excel, Tableau

Technical skills: Machine Learning, Data Mining, Quantitative analysis, Time Series Analysis, Maths

POSITIONS OF RESPONSIBILITY

•Event Planning

Feb 2023

- Core team member of BITOTSAV'23 Jharkhand's biggest fest, led and strategized the work of 50+ members in design, sponsorship's & marketing.