

BANDARU VIGHNESHWAR RAO

| +91 7396630806 | vighneshwarraobandaru@gmail.com |

<https://www.linkedin.com/in/vighneshwarrao> | <https://vighneshwarrao.github.io/MyPortfolio/>

SUMMARY

Computer Science graduate with a specialization in Artificial Intelligence and Machine Learning, experienced in machine learning, statistical analysis, and backend deployment. Built and deployed real-world projects including a house price prediction system and a full-stack A/B testing platform using Python, scikit-learn, FastAPI, and AWS. Strong in data preprocessing, model development, and translating data into scalable solutions

SKILLS

Programming Languages: Python, SQL, C, Java

Libraries : Numpy, Pandas, Matplotlib, Seaborn, Scipy, Scikit-learn

Web & Backend Frameworks: SQLAlchemy, FastAPI

Database & Cloud: MySQL, AWS (EC2,S3,RDS), Render

Tools & Platforms : Git, GitHub, Jupyter Notebook, PyCharm, Power BI, Excel

EDUCATION

CMR Institute of Technology, Hyderabad.

Dec 2021-July 2025

B.Tech, Computer Science & Engineering(AI & ML) , CGPA:8.22

Sri Chaitanya jr. College , Hyderabad.

June 2019 -April 2021

Intermediate , Percentage:95%

PROJECTS

Bangalore House Price Prediction System – Personal Project

July 2025

FastAPI, Python, Scikit-learn, Pandas, NumPy, HTML, CSS, JavaScript, GitHub Pages,Render

- Developed an end-to-end machine learning solution achieving 84% R^2 score, trained on Kaggle's real estate dataset with 1,300+ location-based features after rigorous preprocessing and outlier removal.
- Implemented a production-grade FastAPI backend and dynamic JavaScript frontend, allowing users to predict house prices in real-time based on inputs like BHK, area, location, and bathrooms.
- Optimized the deployment pipeline by serializing model artifacts (model.pkl, columns.json) and hosting the frontend via GitHub Pages, enabling zero-cost, real-time ML inference in the browser.

A/B Testing Platform for Experiment Analysis– Personal Project

May 2025-June 2025

FastAPI, Python, MySQL (AWS RDS), AWS S3, Pandas, Matplotlib, Seaborn, Scipy, HTML, CSS, JavaScript

- Built a full-stack A/B Testing platform with a FastAPI backend and GitHub Pages frontend, allowing users to upload CSVs, run statistical tests (T-Test, Chi-Square), and visualize results..
- Integrated AWS S3 and RDS to manage file storage and relational data; backend extracted 20+ variants and metrics dynamically, storing and analyzing results using SQLAlchemy and Scipy.
- Deployed backend on Render and enabled real-time result visualization through backend-generated plots and statistical summaries, cutting manual analysis time by 90%.

Cricket Analytics – Personal Project

Feb 2025-March 2025

Python, BeautifulSoup, Selenium, Pandas, FastAPI, Render, HTML, CSS, JavaScript

- Developed a data-driven cricket team selector to generate India's all-time best XI across formats using custom weighted scoring, performance metrics, and dynamic role-based filters.
- Scraped player stats from ESPNcricinfo using BeautifulSoup and Selenium, followed by data cleaning, EDA, and feature engineering with Pandas for role-wise selection optimization.
- Built a FastAPI backend deployed on Render, and integrated it with a responsive HTML/CSS/JS frontend, enabling users to customize team selection based on batting depth, spinners, and pacers.

Online Retail Sales Analysis – Personal Project

Dec 2024–Jan 2025

Python, Pandas, Matplotlib, Seaborn

- Cleaned and analyzed a dataset of 500K+ rows, performed RFM and churn analysis, and visualized key metrics to support business decisions using Python, Pandas, and Matplotlib.