Lakshmi Bhaarathi E

Data Scientist

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PROFILE

Driven by an analytical mindset and self-motivated nature, I am actively exploring opportunities within the realm of Data Science. My passion lies in extracting valuable insights from data, a skill I have honed through a strong understanding of machine learning and deep learning techniques. I've translated this expertise into practical use by creating comprehensive full-stack data science projects that effectively tackle complex business challenges. With a sharp learning curve, attention to detail, and a passion for contributing to data-driven strategies, I am eager to embark on a successful journey as a Data Scientist.

SKILLS

Python	**SQL**	**MongoDB**	**Statistics**
Machine Learning	**Deep Learning**	**NLP**	**Data Visualization** Matplotlib, Plotly, Seaborn

PROFESSIONAL EXPERIENCE

Associate Data Science Consultant, *PWSkills* 2023/04 – 2023/11

Bengaluru

- Developed a range of educational materials, including assignments, projects, and quizzes, resulting in positive feedback from students and improved engagement.
- Played a pivotal role in providing technical support, consistently resolving student doubts and clarifying concepts, leading to enhanced student satisfaction and performance.
- Collaborated with our team to refine content and support strategies, contributing to the continuous improvement of the educational experience.

PROJECTS

APS Sensor Fault Prediction

Tech Stacks: Python, Sklearn, Pipeline, CI/CD, Dockers.

The problem is to reduce the cost of unnecessary repairs caused by APS sensor failures in Trucks.

- Featuring engineering involved handling missing values with the following methods.
  - **Simple Imputer - KNN Imputer**
- As the data was highly imbalanced it got handled by **SMOTE** technique.
- Being a classification problem several classification machine learning used namely :
  - **Logistic Regression**
  - **KNN Classifier**
  - **Random Forest Classifier**
  - **Cat Boosting Classifier**
  - **XGB Classifier**
- Of all the techniques used XGB Classifier and Simple Imputer with strategy constant gave better results.
- The model accuracy is **99.3%** measured with F1-score.

- The model was then prepared for continuous development following **CI/CD** pipelines.
- The final model is made available for production environment using **Docker**.

Housing Price Prediction in Chennai

Tech Stacks: Python, Plotly, Sklearn, Heroku

The idea is to analyse the real estate data in Chennai and predict the price of the properties from it.

- Feature engineering involved handling missing values and encoding the categorical variables.
- Exploratory Data Analysis part get done with Plotly and Matplotlib.
- Machine learning algorithms used :
  - **Linear Regression**
  - **Decision Tree**
  - **XGB**
- The models got evaluated with R2 value and XGB gave maximum accuracy of **99.6%.**
- It was then deployed in Heroku for prediction.

EDUCATION

B.Sc. Zoology, *St.Xavier's College* 2017 – 2020

- Completed my graduation with **77.4%.** Palayamkottai
- I have leaded research project in Anti-bacterial activities of plant Indigofera Linnaei on common fish pathogens. Our project came out with positive result in controlling fish pathogens.

Higher Secondary Education, *Pushpalata Vidya Mandir (CBSE)* 2015 – 2017

- Completed my higher secondary education with **78.6%.** Tirunelveli

COURSES

Full Stack Data Science, *Ineuron Intelligence Private Ltd.* Bangalore

Masters in Data Science and Advanced Programming, Chennai
GUVI Geek Network Pvt Ltd.,

CERTIFICATES

- IIT-Madras Certified Masters in Data Science and Advanced Programming
- Python
- Live Metaverse Datathon 1.0

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