Mahendar BS

9164453597 — Portfolio Website — mahendarbs1999@gmail.com — LinkedIn — GitHub

Skills —

Languages: Python, SQL, R
Data Science: Data analysis, statistical analysis, ML, hypothesis testing, Data Scraping.
Visualization: Power BI, Tableau
NLP: Chatbot development
Deep Learning: CNN, RNN, ResNet-50, VGG16
Cloud: Google Cloud (GCP), AWS
Web Dev: Streamlit, Flask
OCR: Tesseract, Google Cloud Vision API
Other Tools Excel, Git, JIRA, Google Analytics, SEO.

Experience

Intellipaat **May 2024 – present**
Intern Data Scientist

- Extensive Hands-on Experience: completed 50+ projects that replicate real-world challenges, aligning my skills with current industry requirements.Through these projects gained practical experience in solving complex business problems enhancing my analytical abilities.

IIT Kanpurs **July 2022 – June 2024**
Teaching Assistant

- My role included simplifying complex design concepts, offering hands-on guidance for projects, and providing personalized feedback to help students refine their work.

Projects

- **Crop Price(MSP) Forecasting**: Link: Web Application *(2024)*
  - Description: In an effort to support farmers, traders, and policymakers in making informed decisions, a forecasting project has been developed to predict crop prices for the next five years (2024 to 2028).
  - This project utilizes historical price data obtained from the Government of India's open data portal, data.gov.in, covering the years 2018 to 2023. The forecasting model incorporates two machine learning techniques: Logistic Regression and Random Forest.
  - Model Evaluation: Achieved high predictive accuracy in regression analysis, with an average R^2 of 95.14% using Logistic Regression and 96.05% with Random Forest.
  - Application Development The final predictions were integrated into a web application developed using Streamlit.
- **Tumkuru Smart City Data Analysis and Visualization**: Link: Github *(2024)*
  - Conducted a comprehensive data analysis of Tumkur smart city metrics by collecting open government data from data.gov.in and structuring it within a SQL relational database in SQL Server Management Studio (SSMS).
  - Developed SQL queries and data views focused on critical urban metrics like demographics, healthcare services, infrastructure, and governance. Integrated these data views into Power BI to create dynamic dashboards with data visualizations .
- **Image-Classification**: Link: Web Application, Github *(2024)*
  - Developed and evaluated image classification models using both traditional machine learning algorithms (SVM, Random Forest, Logistic Regression) and deep learning architectures (CNN, ResNet50, VGG16).
  - SVM, Random Forest and Logistic Regression achieved 70.67%, 55.56% and 70.44% respectively.
  - CNN, ResNet50 and VGG16 achieved 98.21%, 98.83% and 33.33% training accuracy respectively and CNN achieved 100% validation accuracy.
  - Developed and deployed a Flask-based web application for real-time image classification and inference.
- **The Advanced Grocery Management Chatbot**: Link: Github *(2024)*
  - Developed Cyra, an AI-powered chatbot designed to enhance grocery shopping through Natural Language Processing (NLP), Machine Learning (ML) algorithms, and Cloud Integration.
  - Implemented advanced NLP models for conversational ordering, enabling users to interact naturally by adding items and placing orders using simple language inputs.
  - Automated digital receipt handling with PDF generation using FPDF library, and integrated Google Drive API for secure cloud storage and link sharing of receipts through emails.

Education

Indian Institute of Technology Kanpur — M.Tech in Aerospace, First Class grade **Graduated: 2024**