Pradeep

LinkedIn
GitHub

Email : pradeepmsc23@cs.du.ac.in
Mobile : +91- 7015726383

Education

- **Department of Computer Science , University of Delhi** — New Delhi, India
  Master of Science in Computer Science — *Aug. 2023 – July. 2025*
- **Hansraj College , University of Delhi** — New Delhi, India
  Bachelor of Science in Computer Science; GPA: 8.23 — *Aug. 2020 – July. 2023*

Experience

- **Dusker Education** — Remote
  Data Analyst Intern — *Nov 2023 – Apr 2024*
  - **Data Extraction**: Utilized web scraping and API integration techniques to extract and organize data from an online education platform into a structured database format.
  - **Database Management**: Developed and managed a MySQL database to store and organize question data, facilitating easy querying and efficient data handling.
  - **Automation**: Automated quality assessments and data processing with Python scripts, improving the efficiency and accuracy of our analysis.
  - **Reporting**: Created detailed monthly reports on answer quality and expected revenue, using SQL and Excel, to track performance and meet targets.
  - **Growth Contribution**: Contributed to a 15% increase in data processing efficiency and helped reduce data quality issues by 10%, directly supporting the company's growth in data-driven decision-making.

Projects

- **Next Word Prediction (Auto-Completion)**: Developed an LSTM-based model for next-word prediction to enhance text input efficiency with real-time suggestions.
  - **Model Development**: Fine-tuned the architecture with both LSTM and GRU layers, testing various configurations for optimal performance.
  - **Evaluation & Performance**: Achieved an accuracy of 69.20% with a loss of 1.3917.

  Tools & Technologies: `Numpy, TensorFlow, Keras, NLP, Hyperparameter Tuning, Embeddings`

- **Churn Prediction**: Developed a predictive model to identify customer churn and improve retention strategies.
  - **Model Development**: Designed and implemented an ANN model to analyze customer churn patterns and predict potential churners.
  - **Feature Engineering**: Selected key features, such as customer behavior and demographic data, to improve model performance.
  - **Evaluation & Optimization**: Achieved an accuracy of 86.45% with a loss of 0.3154 on the training set, and a validation accuracy of 85.80% with a loss of 0.3479, providing actionable insights for customer retention.

  Tools & Technologies: `Pandas, NumPy, TensorFlow, Keras, Scikit-learn`

- **Basketball Shot Prediction**: Predicted NBA shot success using models like Logistic Regression, Neural Networks, and XGBoost.
  - **Model Evaluation**: Performed data preprocessing, model evaluation, and feature importance analysis. Achieved maximum accuracy of 62% with XGBoost, Neural Networks (Dropout Regularization), and Gradient Boosting (PyCaret).
  - **Computational Efficiency**: XGBoost provided efficient processing (0.652 seconds), while Logistic Regression achieved comparable accuracy (60%) with the fastest processing time of 0.363 seconds.

  Tools & Technologies: `Logistic Regression, Neural Networks, Random Forest, XGBoost, PyCaret, Python`

Certifications

- **Machine Learning Specialization**: By Andrew Ng from Coursera
- **Python for Data Science**: From LernX

Extra-Curricular Activities and Achievements

- **National Science Olympiad**: Received Gold Medal (Zonal rank: 1)
- **Volunteer - Sankalan Tech Fest**: Assisted in planning and executing various tech events, including workshops, hackathons, and keynote sessions. Facilitated communication between teams and addressed issues promptly to maintain event schedule.

Programming Skills

- **Languages**: Python, SQL, Java
- **Frameworks and Libraries**: PyCaret, Pandas, Scikit-learn, Keras
- **Operating Systems**: Windows, Linux
- **Developer Tools**: Git, VS Code