Vishnupriya Polamreddy

469-686-0078 | vishnupriyapolamreddy@gmail.com | LinkedIn | Github | Dallas, TX

EDUCATION

The University of Texas at Dallas, USA **August 2023 - May 2025**

Master of Science in Information Computer Science **GPA:3.45/4**

Coursework: Database Design, Design and Analysis of Algorithms, Statistical Methods for Data Science, Big Data & Analytics, Network Security, Information Retrieval, Computer Vision, Secure Software Development, Machine Learning, Artificial Intelligence, Web Programming Languages

SRM University, India **July 2019 - August 2023**

Bachelor of Technology in Computer Science and Engineering **GPA:3.6/4**

Coursework: C Programming, Data Structures and Algorithms, Object Oriented Design and Programming, Operating Systems, Computer Networks, Compiler Design, Database Management Systems, Data Mining and Analytics.

SKILLS

Programming Languages: Python, SQL, R, HTML, CSS, React, Flask

Data Visualization & BI Tools: Power BI, Tableau

Databases: MySQL, MongoDB, Microsoft SQL Server, Oracle, MS Access

Big Data & Cloud Technologies: Apache Spark, Hadoop, Databricks, PySpark

Libraries: Pandas, NumPy, Matplotlib, Seaborn

Tools: PyCharm, Jupyter Notebook, R Studio, MS Office - (Excel, Word, PowerPoint & Outlook), MS Excel, GIT, MATLAB, VS Code, LINUX, UNIX

Machine Learning & Analytics: Predictive Modelling, Sentiment Analysis, NLP, Deep Learning (TensorFlow, Keras, PyTorch), Reinforcement Learning

Certifications: Front-End Web UI Frameworks and Tools (Coursera), Java for Android (Coursera), Certificate in Oracle (Oracle Academy)

EXPERIENCE

Hudson's Bay Company, Bengaluru, India

Data Analyst Intern **February 2023 – June 2023**

- Managed and maintained SQL databases, ensuring 99.9% data accuracy through validation and quality checks.
- Conducted exploratory data analysis (EDA) on 100K+ transactions, uncovering trends that improved decision-making for marketing strategies
- Designed interactive dashboards in Power BI and Excel**,** enhancing reporting efficiency by 30% and enabling real-time business insights.
- Automated data cleaning and preprocessing scripts in Python, reducing manual effort by 40% and improving workflow efficiency.

ACADEMIC PROJECTS

Brain Tumor Detection Using Deep Learning Approach, SRM University. **January 2023 – July 2023**

August 2023 - December 2023

- Designed and implemented a deep learning model utilizing Convolutional Neural Networks (CNNs) for the detection of brain tumors in MRI scans.
- Employed TensorFlow and Keras to automate the classification of brain tumors, enhancing diagnostic speed and accuracy.
- Achieved an accuracy rate of 92% on the Kaggle Brain MRI dataset through hyperparameter optimization and the application of dropout regularization.
- Conducted data preprocessing including image resizing, normalization, and augmentation to improve model robustness and generalization.
- Published findings in the International Conference on Internet of Things (ICIOT), highlighting the model's contribution to AI-powered medical diagnostics.

Travel Advisor, UT Dallas **August 2025 – December 2025**

- Engineered a Personalized Travel Recommendation System leveraging React, Flask, Python, and advanced Machine Learning algorithms.
- Developed a responsive, user-centric front-end using React to display personalized recommendations for hotels, restaurants, and attractions, ensuring an intuitive and seamless user interface.
- Architected the back end with Flask, efficiently managing user requests, processing inputs, and facilitating communication with the recommendation engine.
- Implemented Neural Collaborative Filtering (NCF) and K-Nearest Neighbors (KNN) algorithms to generate tailored recommendations based on individual user preferences.
- Leveraged a hybrid approach combining collaborative filtering and content-based filtering to optimize the recommendation engine for high-precision results, achieving an accuracy rate of 95% in personalized recommendations.
- Exploited the front-end to display results dynamically, providing users with real-time, AI-driven travel planning insights.

Library Management System, UT Dallas **January 2025 – May 2025**

- Constructed the front-end of a Library Management System using HTML, CSS, and Java, creating an intuitive and user-friendly interface.
- Utilized SQL to manage critical components such as book catalogs, member information, and transaction workflows, ensuring data integrity and efficient operations.
- Integrated advanced search capabilities, enabling users to search for books by title, author, and genre, improving discovery and accessibility.
- Streamlined essential tasks, including book checkouts, returns, and availability updates, optimizing library workflows and user interactions.
- Ensured smooth communication between the front-end interface and the back-end database, enhancing system performance and overall user experience.

ADDITIONAL INFORMATION

Eligibility: VISA, Eligible to work in the US for internships and full time for up to 36 months