Neeresh Kumar Perla

neereshkumar.nk@gmail.com| (774) 518- 9337 | https://www.linkedin.com/in/nperla

TECHNICAL SKILLS

- **Programming Languages:** Python, R, SQL, Bash
- **Data Visualization Packages & Tools:** Seaborn, Matplotlib, Excel, Tableau
- **Databases:** MySQL**,** MS SQL Server (SSMS), SSIS(ETL), NoSQL (MongoDB, Cassandra, DynamoDB, Neo4J)
- **Cloud & Big Data: Microsoft Certified Data Scientist Associate (AzureML, MLFlow, CosmosDB, Azure Databricks, Azure Files)**
- **Machine Learning & Stats:** Linear & Logistic Regression, Deep Learning, KNN, Decision Tree, Random Forest, Clustering, A/B testing
- **Others:** HTCondor, Pegasus Workflow Management System, GIT, Parallel Programming

WORK EXPERIENCE

University of Massachusetts Dartmouth, Dartmouth, MA **June 2023- Present**

Research Assistant

- Utilizing Apple Silicon GPUs for gravitational wave data analysis and collaborating with Collin Capano on the development of an Apple Silicon cluster for gravitational wave astronomy, fostering innovation at the intersection of hardware and astrophysics
- Conducting rigorous benchmarking and performance tuning to achieve superior results in signal detection and data processing, enhancing the precision and efficiency of research efforts in gravitational wave astronomy

Cognizant, Hyderabad, India **Mar 2021- Dec 2022**

Programmer Analyst

- Developed ETL pipelines by integrating data from over 100 files to load into Enterprise Data Warehouse using SSIS
- Conducted data validation, designed customized SQL scripts reducing the query time by over 22%
- Created user-friendly Tableau dashboard to visualize and monitor vital Business KPIs reducing manual reporting work

Data Engineer Intern **Feb 2020- Sep 2020**

- Gathered and processed a substantial dataset comprising movie-related information, encompassing user ratings, movie details, and user profiles, to support comprehensive analysis and research
- Utilized Apache Spark's MLlib library to implement the ALS algorithm and engineered the data pipeline to transform and preprocess the dataset, ensuring data quality and compatibility with the ALS model

WingfoTech Pvt. Ltd, Hyderabad, India **May 2019- Jul 2019**

Artificial Intelligence

- Engaged in extensive self-learning to develop a comprehensive understanding of diverse machine learning algorithms, including but not limited to decision trees, random forests, support vector machines, and neural networks
- Created data preprocessing pipelines to enhance dataset quality and experimented with feature engineering, dimensionality reduction, and hyperparameter tuning to optimize model performance

PROJECTS

Data Science Salary Prediction

- Conducted web scraping on Glassdoor to collect salary data, followed by data analysis, feature engineering, and feature selection to prepare the dataset for regression modeling
- Built a regression model using the processed data to predict salaries, leveraging techniques such as feature engineering and selection to enhance model performance and accuracy

Language in Education Project: Investigating Regional Teaching's Influence

- Administered the survey to a representative sample of students, considering factors such as demographics, educational levels, and regional language backgrounds to ensure a diverse range of responses
- Examined and performed statistical analysis on the responses to identify patterns, correlations, and variations, enabling a comprehensive understanding of the impact of teaching in the regional language on students' knowledge

EDUCATION

University of Massachusetts Dartmouth, Dartmouth, MA **December 2022 - present**

Master of Science in Data Science **GPA: 4.0**