Perumalla Litesh

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Prosper, TX liteshperumalla@gmail.com +1(972)626-4159 perumalla litesh liteshperumalla

Professional Summary

Data Science graduate student with a 4.0 GPA and a strong foundation in data analysis, machine learning, and deep learning methodologies. Interested in developing innovative solutions using Python, R, and powerful data visualization tools such as Power BI and Tableau. Project experience in predictive modeling, image recognition using CNNs, and data mining.I am committed to leveraging analytical expertise and collaborative skills to drive impactful business insights and technological growth.

Education

University of North Texas *Jan 2024 – Dec 2025*
Master's in Data Science *GPA: 4.0/4.0*

- **Coursework:** Data Visualization, Data Analytics, Data Mining, Machine Learning, Data Modeling, Data Engineering

Skills

Programming Languages: Python, R, SQL,Data Cleaning, Exploratory Data Analysis (EDA), Data Mining, Machine Learning.

Data Engineering: ETL Pipelines, BigQuery, Apache Spark, Hadoop/MapReduce, Airflow, Snowflake, Data Warehousing, Cloud Platforms (AWS, GCP).

Deep Learning: Artificial Neural Networks (ANN), Convolutional Neural Networks (CNN),TensorFlow, PyTorch, Keras.

Data Analysis and Statistical Tools: SPSS, SAS, Excel, Data Wrangling, Statistical Hypothesis Testing, Predictive Modeling.

Visualization Tools: Tableau, Power BI, Looker Studio, Matplotlib, Seaborn, Plotly.

Database Management: MySQL, PostgreSQL.

Software Development and Tools: Git, Docker.

Big Data and Cloud Technologies: Apache Hadoop, Apache Spark, PySpark, AWS S3, AWS Lambda, GCP BigQuery.

Work Experience

Discovery Park Library Services Academic Assistant *Denton, TX*
University of North Texas *Oct 2024 – Present*

- Provided comprehensive in-person, phone and virtual assistance to more than 100 students and faculty per week, improving their ability to access and use library resources effectively.
- Collaborated with faculty to identify and connect them with specialized resources, contributing to more effective teaching and impactful research projects.

Volunteer Experience

College of Information Student Ambassador *Denton, TX*
University of North Texas *Oct 2024 – present*

- Collaborated with a diverse team of ambassadors to coordinate activities, support college initiatives, and provide guidance to incoming students.
- Contributed to creating a welcoming and engaging environment for students, encouraging academic growth and involvement within the college.

Publications

Web Security using Cryptography: An Empirical Review May 2024

Projects

Streamlining Healthcare Delays *2024*

- The project focuses on analyzing data to address common healthcare delays, such as long waiting times for appointments and insurance processing issues. The project aims to enhance operational efficiency in healthcare systems through data cleaning, storage, and comparative analysis of different frameworks. The ultimate goal is to provide actionable insights that can minimize delays and improve patient outcomes.
- Tools Used: Open Refine, Python, Hadoop, Hive, Spark, Google cloud, Big Query, Apache Beam.

Skin Cancer Detection Using Convolutional Neural Network *2024*

- Engineered and implemented a Convolutional Neural Network **(CNN)** model on a dataset of over **10,000 medical**

images, achieving early lesion detection with an **85%** identification accuracy

- Tools Used: Python, matplotlib, sci-kitlearn, numpy, pandas, Tensorflow, CNN.

Predicting Liver Disorder Using Machine Learning. *2024*

- Developed and trained an Artificial Neural Network **(ANN)** model to predict liver disorders, achieving over **90%** prediction accuracy using a comprehensive medical dataset.
- Tools Used: Python, matplotlib, sci-kitlearn, numpy, pandas, Tensorflow, MLPClassifier, ANN.

Data Analysis using Excel *2021*

- Conducted in-depth data analysis on demographic datasets across multiple states, categorizing types of disability, and presenting findings in a detailed analytical report.
- Tools Used: Excel, Power Point.

Stock Analysis using SQL *2021*

- Conducted in-depth data analysis on demographic datasets across multiple states, categorizing types of disability, and presenting findings in a detailed analytical report.
- Tools used: SQL, Excel, Power Point.

Awards & Scholarships

Lucille Murchison Graduate Scholarship Oct 2024

- Awarded for exceptional academic performance and commitment to research excellence in data science. This prestigious scholarship recognizes top performing graduate students who demonstrate outstanding dedication and maintain a 4.0 GPA.

Achievements

Secured Runner up in HackUNT overall category Oct 2024

- Secured 2nd place in the HackUNT hackathon at the University of North Texas by designing an ML-based fraud detection system for Goldman Sachs using Python and machine learning libraries; deployed an interactive web application with Streamlit, achieving high accuracy in fraud detection.