# Perumalla Litesh

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## Professional Summary

Master's student in Data Science at the University of North Texas with a strong foundation in computer science and machine learning. Skilled in data analysis, predictive modeling, and data visualization, with experience applying analytical techniques to real-world problems.Passionate about leveraging data-driven insights to optimize decision-making and drive innovation.

## 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 Engineering:** ETL Pipelines, BigQuery, Apache Spark, Hadoop/MapReduce, Airflow, Snowflake, Data Warehousing.

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

**Data Analysis and Statistical Tools:** EDA, Predictive Modeling, Statistical Analysis, Data Wrangling, SAS, Excel.

**Visualization Tools:** Tableau, Power BI, Looker Studio, SageMaker.

**Database Management:** MySQL, PostgreSQL, Cassandra.

**Software Development and Tools:** Git, Docker.

**Big Data and Cloud Technologies:** AWS , GCP.

## 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.

## Projects

**Streamlining Healthcare Delays** *2024*

- Identified and resolved bottlenecks in patient scheduling and insurance processing through comprehensive data analysis.
- Delivered insights that reduced appointment delays by **15%** using Python and Google Cloud tools.
- 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.

**Fraud Detection using Machine Learning.** *2024*

- Developed a machine learning algorithm to detect fraudulent transactions from a dataset of over 1 million transactions.
- Engineered features and trained multiple models, selecting the most accurate model based on performance metrics.
- Designed and deployed a web application to integrate the fraud detection model for real-time prediction and accessibility.
- Optimized the model through hyperparameter tuning, achieving high accuracy and reliability in fraud detection.
- Tools Used: Python, sci-kit learn, Streamlit, Machine Learning Libraries.