PULUKAM PAVAN KUMAR

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EDUCATION

Masters - Data Science and Analytics

August 2023 – May 2025

Florida Atlantic University, Boca Raton, USA

CGPA: 3.85 / 4.00

SKILLS SUMMARY

Languages: Python

Databases: MySQL, Oracle SQL

Statistical Techniques: Hypothesis Testing, Regression Analysis, Statistical Inference **Machine Learning:** Supervised Learning, Unsupervised Learning, Deep Learning, NLP

Libraries: pandas, NumPy, TensorFlow, Matplotlib, seaborn **Framework / Tools:** Google Colab, Jupyter, Tableau, Power BI

Soft Skills: Critical thinking, Problem solving, Communication

WORK EXPERIENCE

Internship - ExcelR Solutions (Data Science)

February 2023 - August 2023

- Worked extensively on deep learning and NLP projects focused on real-world business applications. Developed an automated resume screening system using LSTM-based deep learning and NLP techniques, improving candidate classification accuracy by 20% through hyperparameter tuning and feature engineering.
- Applied data preprocessing techniques including data cleaning, tokenization, and vectorization to efficiently handle large volumes of textual data. Enhanced recruitment processes by reducing manual screening efforts and accelerating candidate shortlisting.
- Built predictive models for stock market price forecasting using XGBoost, Random Forest, and LSTM algorithms.
- Conducted feature engineering, hyperparameter tuning, and data preprocessing to optimize model accuracy, achieving 85% accuracy in stock price movement predictions. Provided actionable insights to investors by forecasting trends, helping inform better investment decisions.

Capgemini - Technical Training (Analyst Position)

August 2022 - February 2023

- Completed hands-on training covering Python programming, SQL database management, and Cloud Computing fundamentals. Developed proficiency in writing efficient Python scripts for data manipulation and analysis.
- Gained expertise in SQL for querying, managing, and analyzing relational databases. Acquired foundational knowledge of cloud-based data storage and processing solutions to support scalable analytics.
- Strengthened problem-solving and logical thinking skills through real-time case studies and technical challenges and built a solid technical foundation for applying analytical skills in business and enterprise environments.

PROJECTS

Liver Cirrhosis Prediction Using Machine Learning

Designed and implemented a machine learning model combining XGBoost, Logistic Regression, and Multi-Layer Perceptron to predict liver cirrhosis based on clinical and demographic data. Integrated NLP techniques to extract insights from textual patient information, achieving 87% accuracy to aid early-stage disease detection.

Facial Recognition Using Convolutional Neural Networks

Developed a facial recognition system leveraging CNNs using TensorFlow and OpenCV frameworks. Employed data augmentation to increase robustness across lighting and orientation variations, achieving 92% recognition accuracy for applications in security and identity verification.

CapitaLeap: Stock Market Analysis & Investment Advisor (Hackathon Project)

Collaborated in a team to build an Al-powered stock recommendation platform integrating sentiment analysis from news and social media with time series forecasting. Improved investment decision-making by delivering real-time, data-driven stock recommendations tailored to market conditions.

Loan Approval Prediction Using Logistic Regression

Developed a predictive model to forecast loan approval outcomes using applicant demographic, financial, and credit history data. Applied label encoding, feature engineering, and data cleaning techniques, achieving 88% accuracy to support automated risk assessment and streamline loan approvals.

Company Sales Classification Using Random Forest

Built a Random Forest model to categorize companies into High or Low Sales segments using features like income, advertising spend, and shelf placement. Identified key sales drivers to optimize marketing budgets and increase ROI.

Airline Passenger Forecasting (Time Series Analysis)

Conducted forecasting on monthly airline passenger data using Moving Average, Exponential Smoothing, and Holt-Winters models. Evaluated accuracy with RMSE, providing actionable insights for fleet and pricing optimization.

CERTIFICATIONS

• Hackathon Participant (Call for Code, IBM, IEEE, NextEra Energy, Synergist)