AKASH KUMAR KONDAPARTHI

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EDUCATION

University of Florida, Gainesville, FL | MS in Electrical and Computer Engineering | **GPA: 3.7/4** Aug 2022 – May 2024
Relevant Coursework: Advanced Data Structures, Database Management Systems, Machine Learning, Image Processing & Computer Vision

SKILLS

Programming Languages: Python, SQL, C, HTML & CSS, JavaScript, R
Data Analysis Tools: Microsoft Excel (VLOOKUP, Pivot Tables, Power Query), Google Sheets
Databases: MySQL, PostgreSQL, SQL Server, DB2, Google BigQuery
Visualization: Tableau, Power BI, Excel Charts, matplotlib, seaborn
Technologies: AWS (EC2, S3), PySpark, Docker, Apache Spark, Google Analytics
Machine Learning: Python - NumPy, Pandas, PyTorch, TensorFlow, Keras, Scikit-learn, NLP.
Applications: Git, GitHub, Linux, MS Office, PowerPoint, Jupyter, MATLAB, Snowflake, Google Analytics.

EXPERIENCE

Machine Learning Engineer (Data Analytics) | IFAS | Gainesville, FL Feb 2023 – Present

- Conducted exploratory data analysis (EDA) on 50+ GB of imaging data, identifying key trends and anomalies, improving data quality by 32%.
- Designed and implemented ETL pipelines using Python & SQL, integrating and processing data from 12 sources for streamlined analysis.
- Built interactive dashboards using Power BI and Excel, reducing report generation time by 65% and enabling quick decision-making.
- Collaborated with cross-functional teams to translate complex data findings into actionable recommendations, improving operational efficiency by 18%. Managed a database of 20,000+ records, ensuring data integrity and accessibility for research teams.
- Developed automated reporting processes using Python scripts, saving team members 10+ hours of work per week.
- Managed the integration of IoT devices to automate data collection, enabling seamless reporting and visualization for stakeholders.
- Produced actionable dashboards and reports using Python, Power BI, and Excel, translating complex data into comprehensible insights for non-technical audiences.

Software Engineer | Wipro | Hyderabad, India Aug 2021 – July 2022

- Designed and optimized ETL pipelines for 15+ data sources, ensuring 99.8% data accuracy for analytical reporting.
- Created and maintained connections to diverse systems including SQL Server, Amazon Redshift, and SharePoint Online, improving data accessibility by 40%. Supported migration of 5TB legacy data to AWS Redshift, enhancing query performance by 75% for real-time analytics.
- Created and maintained Power BI dashboards used by 200+ business stakeholders, translating complex datasets into visual insights.
- Collaborated with business teams to understand requirements and develop tailored data solutions that drove a 25% improvement in decision-making efficiency.
- Collaborated with cross-functional teams to support the migration and deployment of Power BI dashboards, enabling stakeholders to derive actionable insights from complex datasets.

PROJECTS

E-commerce Customer Behavior Analysis | GitHub

- Developed comprehensive e-commerce analytics solution analyzing 100,000+ customer transactions across 32,000+ products.
- Created an interactive Power BI dashboard revealing distinct customer segments and purchasing patterns.
- Identified 4 high-value customer segments accounting for 70% of revenue and implemented targeted retention strategies with potential to increase repeat purchase rate by 53% (3.4% to 5.2%).
- Developed data-driven business recommendations forecasting $2.4M - $2.9M in additional annual revenue through optimized marketing initiatives, inventory management, and pricing strategies.

Hospital Readmission Prediction and Analysis | GitHub

- Cleaned and integrated healthcare data from 5+ sources, creating a unified dataset of 100,000+ patient records.
- Conducted statistical analysis to identify significant predictors of hospital readmission, focusing on demographic and treatment factors.
- Developed machine learning models to predict 30-day hospital readmissions for diabetic patients.
- Developed an interactive visualization dashboard enabling hospital administrators to identify high-risk patient segments.
- Demonstrated potential cost savings of $450,000 per 1,000 patients through targeted intervention strategies based on data insights.

Supermarket Sales Analyzer | GitHub

- Performed comprehensive EDA on 50,000+ supermarket transactions to identify sales patterns, seasonal trends, and product correlations.
- Derived complex insights using machine learning and pattern recognition algorithms such as linear and logistic regression, random forest classifiers, and artificial neural networks.
- Created interactive Tableau dashboards showcasing key performance metrics, customer segments, and regional variations.
- Utilized SQL for data aggregation and Python for statistical analysis to identify underperforming products and categories.
- Developed actionable business recommendations that could increase sales by 23% through targeted merchandising strategies.

Credit Card Default Prediction and Analysis | GitHub

- Built a machine learning pipeline to predict credit card defaults using the UCI dataset, improving risk assessment with a 77% ROC-AUC score.
- Performed data preprocessing to enhance model performance, including handling outliers, categorical encoding, and feature scaling.
- Conducted EDA and visualization using Python and provided business insights into key risk factors. Created a visualization dashboard highlighting customer risk segments, enabling targeted intervention strategies that could potentially reduce default rates by 15%.

PUBLICATIONS

Kondaparthi, A.K.; et. al. (2024). Utilizing High-Resolution Imaging and Artificial Intelligence for Accurate Leaf Wetness Detection for the Strawberry Advisory System (SAS). Sensors, 24(4836). https://doi.org/10.3390/s24154836