AKASH KUMAR KONDAPARTHI

+1 (352) 709-9437 | akashkondaparthi@gmail.com | linkedin.com/in/akashkk | GitHub

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, Basic R
Data Analysis Tools: Microsoft Excel (VLOOKUP, Pivot Tables, Power Query), Google Sheets
Databases: MySQL, PostgreSQL, SQL Server, DB2
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.
Applications: Git, GitHub, Linux, MS Office, Jupyter, 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, processing data from 12 different sources for streamlined analysis.
- Created interactive dashboards using Power BI and Excel, reducing report generation time by 65% and enabling real-time decision-making.
- Collaborated with cross-functional teams to translate complex data findings into actionable recommendations, improving operational efficiency by 18%.
- Managed 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.
- Built and maintained connections to diverse systems including SQL Server, Amazon Redshift, Snowflake, and SharePoint Online, improving data accessibility by 40%.
- Supported migration of 5TB of 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

- **Credit Card Default Prediction and Analysis** | GitHub
  Built a machine learning pipeline for predicting credit card defaults using the UCI dataset, improving credit 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 visualization dashboard highlighting customer risk segments, enabling targeted intervention strategies that could potentially reduce default rates by 15%.
- **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 ML models to predict 30-day hospital readmissions. Developed 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, 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 overall sales by 23% through targeted merchandising strategies.
- **E-commerce Customer Behavior Analysis** | GitHub
  Developed comprehensive e-commerce analytics solution on 100,000+ customer transactions across 32,000+ products. Created Power BI dashboard revealing customer segments and purchasing patterns. Identified 4 high-value customer segments accounting for 70% of revenue and implemented targeted retention strategies to increase repeat purchase rate by 53%. Developed data-driven business recommendations forecasting $2.4M-$2.9M in additional annual revenue through optimized marketing initiatives, inventory management, and pricing strategies.

PUBLICATIONS

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