Riteesh Grandhi

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Highly motivated Data Analyst in harnessing the power of data using Python, SQL, ETL, and BI tools (Tableau, PowerBI). Proven ability to transform raw data into actionable insights through in- depth analysis and compelling visualizations. Demonstrated success in collaborating with cross-functional teams to translate business needs into data-driven solutions, driving quantifiable improvements in key metrics. Passionate about leveraging data to optimize processes, inform strategic decision-making, and achieve organizational goals.

AREAS OF EXPERTISE

Data Analysis | Data Visualization |Data Integration & Data Warehousing | Problem-Solving and Analytical Thinking | Data Quality Assurance & Validation | Business Intelligence & Reporting | Collaboration and Teamwork

TECHNICAL SKILLS

Languages: Python, R, SQL, Java, JavaScript,Machine Learning,Artificial Intelligence ,Deep Learning | **Databases**: MySQL, SQL Server, AWS DynamoDB, PostgreSQL, Snowflake **Data Visualization**: Tableau, MS PowerBI, DBT| **Cloud**: Azure, AWS | **Project Management & Tools**: MS Office Suite, Visual Studio Code, Git Version Control, JIRA, SDLC, SAP, Agile Methodologies, Waterfall model, UI Path

Education

Master of Science (MS) in Data Analytics Engineering - George Mason University

Bachelor of Technology (BTech) in Computer Science with specialization in Artificial intelligence and Machine Learning

Guru Nanak University – May 2020 - May 2024

PROFESSIONAL EXPERIENCE

Data Analyst – FUL.io **August 2023 – August 2024**

- Developed and deployed dynamic Tableau dashboards for a retail analytics project, allowing key stakeholders to track sales trends, customer demographics, and inventory metrics in real-time, leading to a 25% reduction in reporting time.
- Used Python for data cleaning and preprocessing large retail datasets, leveraging libraries like Pandas and NumPy, and created data visualizations using Seaborn and Matplotlib to identify key customer behavior trends and sales performance insights prior to Tableau integration.
- Designed advanced Tableau dashboards using calculated fields, parameters, and interactive filters, enabling a finance team to visualize profit margins and forecast revenue growth, driving a 15% increase in accurate financial predictions.
- Developed dynamic Tableau dashboards for retail analytics by leveraging calculated fields to categorize customers into age groups and analyze sales trends, enabling targeted marketing strategies that contributed to a 40% increase in campaign efficiency.
- Implemented Level of Detail (LOD) expressions in Tableau to calculate customer-level sales and product category profitability metrics, providing granular insights that influenced decision-making and improved revenue forecasting accuracy by 15%.
- Created solution-driven views and dashboards, incorporating diverse chart types such as Pie Charts, Bar Charts, Tree Maps, Line Charts, Area Charts, and Scatter Plots within Tableau.
- Utilized Tableau functions such as IF, CASE, and WINDOW_SUM to create advanced calculations for trend analysis and cumulative sales metrics, enhancing stakeholder understanding of performance trends and driving data-driven decision-making.
- Leveraged Excel functions such as VLOOKUP for efficient data retrieval, SUMIFS for multi-condition aggregations, and Conditional Logic (IF, AND, OR) to automate decision-making processes, streamlining report generation and improving data accuracy by 30%.
- Implemented robust security measures for Tableau Server, including role-based access controls and data encryption, protecting sensitive financial data for a multinational corporation.
- Collaborated with cross-functional teams to implement Tableau dashboards, enhancing reporting accuracy and enabling better decision-making across departments by creating interactive visualizations from Python-prepared datasets.
- Followed agile methodologies and implemented them in the project by setting up Sprint for every two weeks and daily stand-up meetings.

CERTIFICATIONS

- Google Certified Professional Data Engineer
- Microsoft Professional Program Certification in Data Science

PROJECTS

Anomaly Detection in Meteorological Data Using Convolutional Neural Networks (CNNs)
Implemented a novel anomaly detection model leveraging CNNs to identify unexpected weather patterns in large meteorological datasets, enhancing accuracy in weather forecasting and disaster preparedness.

- Utilized k-Nearest Neighbors, autoencoders, and z-scores to improve anomaly detection capabilities.
- Conducted extensive data preprocessing and exploratory data analysis to optimize the model's performance.
- Achieved significant improvements in anomaly detection accuracy, contributing to the field of climate informatics.

Image Classification for Medical Diagnostics Using Deep Learning

Developed an advanced deep learning model for classifying medical images, contributing to early disease detection and improved diagnostic accuracy.

- **Implemented Convolutional Neural Networks (CNNs)** using **TensorFlow** and **Keras**, leveraging architectures such as **ResNet-50** and **VGG16** for superior image classification performance.
- **Utilized Transfer Learning techniques** to enhance model generalization, reducing training time and improving accuracy on limited labeled medical datasets.
- **Achieved a 92% accuracy** in detecting pneumonia from chest X-ray images, outperforming traditional machine learning methods.
- **Preprocessed and augmented large-scale medical datasets** (e.g., **NIH Chest X-ray dataset**) using OpenCV and TensorFlow's ImageDataGenerator to improve model robustness.
- **Integrated Explainable AI (XAI) techniques** such as **Grad-CAM** to generate heatmaps, enabling interpretability and trust in model predictions for medical professionals.
- **Deployed the model as a cloud-based API** using **Flask and FastAPI**, hosting on **Google Cloud PlatformAmazon Web Services (AWS) with TensorFlow Serving** for real-time inference.
- **Optimized computational efficiency using TensorFlow Lite**, enabling on-device predictions for mobile health applications.