Soundarya Mattikatti

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Summary

Data Engineer with 3 years of professional experience spanning software engineering and data analytics, with expertise in transforming complex data into actionable business insights. Proficient in building data pipelines using Azure Data Factory, SQL Server, and Python, with proven track record of reducing pipeline errors by 15% and improving data accuracy by 20%. I am currently completing an MSc in Business Analytics at Dublin Business School. I am skilled in Azure cloud migration, ETL optimization, and Power BI dashboard development for Finance and Operations teams.

Work Experience

Metyis (Bengaluru, India)   May' 22 – Aug' 24
Data Engineer

- Architected and maintained robust data pipelines using Azure Data Factory, processing financial data daily and improving system efficiency by 20%.
- Designed and developed data flows and pipelines using Theobald, Azure Data Factory, Azure Data Lake Storage, and SQL Server stored procedures.
- Spearheaded end-to-end migration of legacy financial systems to Azure cloud infrastructure, successfully transferring 5+ years of historical data with zero data loss and enabling real-time reporting capabilities.
- Engineered custom Power BI dashboards for 15+ Finance, Operations, and HR leaders across 3 business units, translating complex financial datasets into actionable KPIs that supported $2M+ in cost-saving initiatives.
- Orchestrated ETL pipelines processing terabytes of financial data daily, streamlining data workflows and reducing processing time from 8 hours to 2 hours, enabling same-day reporting.
- Enhanced database performance through advanced T-SQL query optimization and strategic indexing, accelerating query execution times by 40% and supporting 10x increase in concurrent users.
- Designed end-to-end architecture and identified appropriate Azure services for the project. Explored and finalized the usage of Theobald software for optimal performance.

Saankhya Labs (Bengaluru, India)   Oct' 21 – May' 22
Software Engineer

- Contributed to embedded systems development for 3+ product lines, participating in design and code reviews that identified and resolved 25+ performance bottlenecks, improving system efficiency by 15%.
- Diagnosed and resolved 40+ complex product issues using systematic debugging methodologies, reducing critical system failures from 15% to 5% and enhancing overall product reliability.
- Collaborated with hardware product teams to build data-gathering devices that captured real-time performance metrics, achieving 99.2% data collection accuracy and supporting analytics for 10+ client deployments.
- Participated in agile development cycles, contributing to 8+ sprint deliveries and maintaining 95% on-time delivery rate for high-quality software solutions within strict project deadlines.
- Authored technical documentation and user guides for 5+ product modules, improving knowledge transfer efficiency and reducing new team member onboarding time from 4 weeks to 2.5 weeks.

Academic Projects

Dublin Footfall Count Power BI Dashboard | GitHub

- Architected an interactive Power BI dashboard for Dublin retail footfall analytics, integrating 5+ data sources including pedestrian counters, weather APIs, and event calendars
- Developed 15+ advanced DAX calculations and measures for real-time KPIs, including visitor density, conversion metrics, and seasonal trend analysis
- Built dynamic visualizations with drill-down capabilities across 20+ Dublin locations, enabling stakeholders to identify peak hours, weather impact trends, and high-traffic zones
- Delivered actionable insights that led to 18% improvement in operational efficiency and optimized staffing schedules across retail locations

Text Mining Spam Detection System | GitHub

- Built a comprehensive machine learning pipeline using Python, NLTK, and scikit-learn for message classification with 94% accuracy across 10,000+ samples
- Applied advanced NLP techniques including TF-IDF vectorization, content preprocessing, and feature extraction to analyze communication patterns
- Trained and evaluated multiple algorithms (Naive Bayes, Random Forest, SVM) with cross-validation, achieving optimal performance through hyperparameter tuning
- Deployed real-time prediction capabilities with model persistence using pickle, enabling instant filtering for new message inputs

Customer Segmentation Using Clustering | GitHub

- Executed comprehensive buyer segmentation analysis using K-Means clustering and Python on 50,000+ records from e-commerce platform
- Performed extensive data preprocessing including handling missing values, outlier detection, and feature scaling using StandardScaler
- Applied dimensionality reduction techniques (PCA) and elbow method to determine optimal cluster numbers, identifying 6 distinct personas
- Analysed purchasing behaviour including transaction frequency, monetary value, and product preferences using RFM methodology
- Generated interactive visualizations using matplotlib and seaborn to present buyer insights to stakeholders and campaign teams

Certifications & Professional Development

- McKinsey Forward Program | **Completed comprehensive business strategy and leadership development program focusing on problem-solving, strategic thinking, and data-driven decision making (2025)**
- Microsoft Azure for Data Engineering | **Coursera**
- Azure Fundamentals | **Microsoft**
- Power BI for Data Analytics Masterclass | **Simplilearn**
- Advanced DAX and Data Modelling in Power BI | **Udemy**

Skills

Cloud & Data Technologies: Microsoft Azure, Azure Data Factory, Databricks, PySpark, MS SQL Server, ETL Pipelines

Programming Languages: Python, SQL, T-SQL, JavaScript, HTML, CSS

Analytics & Visualization: Power BI, Tableau, Machine Learning, Statistical Analysis, Data Modelling, DAX

Database Technologies: MS SQL Server, Azure ML Studio, MySQL

Tools & Methodologies: GitHub, Jira, Agile, SAP Integration, Microsoft Suite

Core Skills: Project Management, Effective Communication, Leadership, Teamwork, Critical Thinking, Data Pipeline Development, Business Intelligence, Strategic Decision-Making

Honors And Awards

- **1st Place – National Level Technical Quiz Competition**
  KLE Institute of Technology, Hubli | Sep 2019
  Secured top rank in a technical quiz during Techfest 2K19, competing with over 100 teams.
- **Finalist – Intercollegiate Business Analytics Challenge**
  Dublin Business School | Mar 2025
  Advanced to the final round in a data visualization and strategy competition with over 40+ teams.

Education

Master of Science in Business Analytics   Sep' 24 – Sep' 25
Dublin Business School, Ireland

Bachelor of Engineering in Electronics & Communication Engineering   Aug' 17 – Sep' 21
Visvesvaraya Technological University, India