

Pragathi Madushinie

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Bilingual: English/Sinhala

TECHNICAL KNOWLEDGE AND SKILLS

Machine Learning & Data Science: Scikit-Learn, TensorFlow, XGBoost, Random Forest, NLP: SBERT, TF-IDF, LDA, Python, Jupyter

Data Engineering & Integration: Informatica, Azure Data Factory, AWS S3, ETL Pipelines, Kafka, Snowflake, Redshift, SQL Server, Oracle, PostgreSQL, MongoDB

Data Management & Modeling: Tableau, Power BI, Spotfire, Tableau Prep, SSRS, Alteryx, Excel (Advanced)

Tools & Platforms: GitHub, VS Code, Microsoft Office Suite, GitLab, VS Code, Microsoft Office Suite, Splunk

Operating Systems: Windows, Linux

EXPERIENCE

Lead Data Scientist / Lead Data Engineer

12/ 2019 – Present

Charter Spectrum, Saint Louis, MO

- Leading a team of 5 data scientists, providing technical mentorship, and setting project roadmaps for AI driven solutions
- Designed and implemented AI-powered auto-call summarization tools, boosting customer service efficiency by 40%
- Developed a vector search-based recommendation engine, increasing customer engagement by 20% Led optimization of ETL pipelines, improving data ingestion efficiency by 40% and reducing latency for business intelligence reporting processes to ingest large volumes of structured and unstructured data into a central repository

Senior IT Data Modeling Lead Analyst

06/ 2018 – 12/ 2019

Express Scripts, Saint Louis, MO

- Achieved a 35% improvement in query performance by leading SQL Server data modeling initiatives, optimizing schemas, and improving data integrity across systems
- Reduced data processing time by 50% through the design and tuning of scalable ETL pipelines integrating multiple upstream data sources
- Mentored junior analysts and pioneered a new data architecture strategy using ER/Studio, increasing retrieval efficiency by 40% and enabling faster access to enterprise insights

Business Data Operations Analyst IV

09/ 2017 – 06/ 2018

Wells Fargo Advisors, Saint Louis, MO

- Automated recurring reporting workflows using Visual Studio Macros and basic Python scripts, reducing manual effort by 40% and improving consistency across financial reports
- Improved forecasting accuracy by 20% by performing advanced statistical analysis and integrating SQL driven data validation protocols
- Boosted data quality by 30% by consolidating fragmented datasets with Python and SQL, and implementing governance standards to support strategic analytics and compliance

Data Analyst & IT Graduate Assistant

05/ 2016 – 07/ 2017

Southeast Missouri State University, Cape Girardeau, MO

- Built and maintained scalable ETL pipelines to process 50K+ student records, improving housing data work flows and enabling data-driven decisions across academic and administrative units

- Implemented a normalized SQL Server database and integrated it with Tableau dashboards, reducing manual data entry errors by 25% and providing real-time access to enrollment and housing records
- Automated reporting and data ingestion workflows using Python, Excel VBA, and SQL, saving over 50 hours per quarter and improving reporting accuracy to 99%

EDUCATION

Master of Science: Data Science	08/ 2025
Bellevue University, Bellevue, NE	GPA 4.0
Master of Business Administration: Executive Business Data Science	06/ 2023
Ottawa University, Kansas City, MO	GPA 4.0
Predictive Modeling in Python for Data Science, Cloud Analytics	
MSc in Technology/IT Management	07/ 2017
Southeast Missouri State University, Cape Girardeau, MO	GPA 3.8
Bachelor of Science in MIT	04/ 2015
University College Dublin, Dublin, Ireland	GPA 3.92
Data Science Boot Camp	10/ 2021
Washington University Saint Louis, Saint Louis, MO	GPA 4.0

CERTIFICATIONS

In Progress, Advanced NLP with Deep Learning, Coursera, Saint Louis, MO
11/2024, Certification of Data Science with Tableau & SQL Certification, Cornell University, New York City, NY
04/2013, Higher Diploma in Computer-Based Information Systems, National Institute of Business Management, Dublin, Ireland
04/2012, Diploma in Computer Systems Design, National Institute of Business Management, Dublin, Ireland