POOJA MANJUNATHA SWAMY

Email: poojam1742000@gmail.com | Phone: +1 571-241-2282 | Linkedin: Pooja_Manjunatha
Fairfax, Virginia - 22031

SUMMARY

Data Analyst with 2.5+ years of experience in analytics, cloud systems, and ML; skilled in PostgreSQL, Python, and data-driven optimization, with an MS in Data Analytics Engineering from George Mason University.

EDUCATION

Master's in Data Analytics Engineering July 2023 – May 2025
George Mason University – Fairfax, VA **3.73 GPA**
Coursework: Coursework: Big Data Analytics, Database Internals, Data Visualization, Query Optimization, Machine Learning (ML), Graph Databases, Cloud Computing and Business Intelligence.

PROFESSIONAL EXPERIENCE

Makerspace Associate - MIX (Mason Innovation Exchange) Feb 2024 – May 2025

- Facilitated 3+ weekly workshops on 3D printing, laser cutting, and studio equipment; guided 50+ student innovation teams in prototyping using Fusion 360, resulting in 10+ completed product demos.

Mphasis Limited – Software Engineering Trainee Aug 2022 – Oct 2022

- Completed structured training on SQL, NoSQL, Python, and full-stack development, including exposure to web frameworks (Django, React), SDLC principles, and OOP concepts; gained foundational understanding of ML applications through case-based examples.

Intern – SONAR & Naval Systems Analyst, BEL Sep 2021 – Oct 2021

- Processed and analyzed SONAR datasets using Python and SQL to support submarine navigation systems; performed signal validation using FFT and filtering techniques; documented data workflows to improve analysis reproducibility for the naval R&D team.

TECHNICAL SKILLS

Programming & Scripting: Python, R, SQL, Bash, JavaScript, PowerShell
Big Data & Cloud: AWS (EC2, S3, Glue), GCP (basic), Hadoop, Spark, Databricks, Snowflake
Data Analysis & ML: Scikit-learn, TensorFlow, SpaCy, Transformers, NLP, NLTK, Statistical Modeling
Databases: PostgreSQL, MySQL, NoSQL, Neo4j, SQLite
Visualization & Tools: Tableau, Power BI, Excel, Google Sheets, Jupyter, GitHub
Multimedia & Others: Soldering, 3D Printing, Studio Lighting, Laser Cutting, Podcasting, Agile Methodology, ETL Pipelines

PROJECTS

ISO Linkage Graphers

- Developed a graph-based intelligence system to analyze fentanyl trafficking networks using Neo4j, AWS Neptune, and Gremlin; implemented Dijkstra's, PageRank, and Community Detection algorithms to uncover key entities. Visualized insights with Tableau/Gephi and deployed system on AWS EC2/S3 with secure data pipelines for structured/semi-structured datasets.

Data Science and Applied Machine Learning Projects

- Diabetes Prediction: Built and tuned ML models (RF, LR, GB) in Python to forecast diabetes using engineered features achieved 85%+ accuracy on test data for diabetes prediction.
- Scraped and analyzed 10,000+ job postings using Python and SQL to extract salary ranges, trending skills, and demand across industries; visualized trends in Tableau to support job-seeking strategies.
- Sentiment Analysis: Developed NLP pipeline (TF-IDF, tokenization) with Python to classify public sentiment.
- Scalable ETL Framework:Developed a scalable decision support system using AWS S3, Glue, EC2, and PostgreSQL; ingested and processed real-time data using Python for live dashboarding and strategic decision-making.
- IMDb Analytics: Analyzed 10K+ IMDb records using Pandas and NumPy to uncover genre-based rating trends and director popularity; visualized insights in Tableau and hosted project on GitHub.

Volumetric Water Flow Monitoring (Award-Winning)

- Built an IoT-based water flow monitoring system using NodeMCU, flow sensors, Django, and PostgreSQL; reduced water waste by 30–40% through real-time alerts and tracking; awarded "Best Innovative Project" by KSCST and presented findings at IJCESR.

Echopods – Invention Project (Co-Founder)

- Leading design of an ergonomic audio device using DSP, AI-driven noise isolation, and 3D modeling; currently prototyping and pursuing IP certification; secured 2nd place in pitch competition.