POOJA MANJUNATHA SWAMY

Data Analyst | Linkedin: [Pooja_Manjunatha](#) | GitHub: [Pooja_Manjunatha_swamy](#)
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SUMMARY

Recent graduate in Data Analytics Engineering from George Mason University with experience in Python, SQL, Tableau, and AWS. Worked on machine learning, NLP, and cloud-based data pipelines through academic and real-world projects.

PROFESSIONAL EXPERIENCE

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

Provided support to undergraduate and graduate students on data and computer science projects, offering guidance in EDA, data cleaning, and visualization. Conducted introductory sessions on data analytics concepts and contributed to a front desk tap-in tracking project by assisting with data collection and basic analysis.

Software Engineering Trainee - Mphasis Limited   Aug 2022 – Oct 2022

Built a basic task manager web app using Django, HTML/CSS, and SQL as part of a full-stack simulation project. Gained hands-on experience in backend logic, OOP, version control through guided training.

SONAR & Naval Systems Analyst - BEL   Sept 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. Standardized and documented signal-processing steps to help the R&D team consistently replicate analysis results for validation and review.

TECHNICAL SKILLS

Programming & Scripting	Python, R, SQL, Bash, JavaScript, PowerShell, HTML, CSS, Django.
Big Data & Cloud	AWS (EC2, S3, Glue), GCP (basic), Hadoop, Spark, Databricks, Snowflake
Data Analysis & ML	Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, TensorFlow, SpaCy, Transformers, NLP, NLTK.
Databases	PostgreSQL, MySQL, NoSQL, Neo4 (Cypher), AWS Neptune (Gremlin)j, SQLite
Visualization & Tools	Tableau, Power BI, Excel, Gephi, Jupyter, GitHub

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EDUCATION

Master's in Data Analytics Engineering   Class of 2025
George Mason University – Fairfax, VA   GPA: 3.73/4

Bachelor of Engineering in Electronics & Communication Engineering   Class of 2018
Visvesvaraya Technological University – Karnataka, India   GPA: 9.10/10

PROJECTS

Augment Linkage: Evidence and Exploration (Capstone) , [TRACCC Research Centre](#)   Jan 2025 - May 2025

- Built a graph-based system using Neo4j and AWS Neptune to identify key fentanyl trafficking entities through PageRank, Dijkstra, and Community Detection.
- Performed entity resolution with Python (Pandas, SQL); visualized insights in Tableau and Gephi.
- Migrated architecture to AWS Neptune with Gremlin for scalable querying; deployed using EC2/S3 with integration of structured and semi-structured data.

Social-Pulse-Analysis: (Academic Project)   Jan 2024 - May 2024

- Analyzed sentiment patterns, user demographics, and engagement metrics across social media using ML models (RF, LR, DT) and EDA. Explored temporal and behavioral insights to inform content strategy..

IMDb Movies & TV Dashboard: (Personal Project)   April 2025

- Built an interactive Tableau dashboard analyzing 100+ years of IMDb data by genre, rating, and popularity using Python for data cleaning and transformation. Enabled insights through dynamic filters and visualizations (line charts, histograms, scatter plots); project repo.

Publications:

- Ravi M.V., and Pooja M., "Automatic Detection of Lung Cancer Based on Convolution Neural Network," published in International Research Journal of Modernization in Engineering Technology and Science (IRJMETS), Vol. 4, Issue 06, India, June 2022. [IRJMETS](#).
- Manasa C., Nisarga Y. P., Pavani K. N., Pooja M., and Ravi M. V., "Computing Volumetric Water Flow Rate and Storing the Data in Website," published in International Journal of Current Engineering and Scientific Research (IJCESR), Vol. IX, Issue VI, India, June 2022. DOI:10.21276/ijcesr. [IJCESR](#)

- F-1 OPT, STEM extension eligibility.