

Data Scientist with an M.S. in Data Science from RIT and 2.5+ years of professional experience applying statistical methods, machine learning, and cloud-based analytics to solve real-world problems. Proven track record of translating data into actionable insights and business outcomes across industries including security, retail, and healthcare. Experienced in hypothesis testing, A/B experimentation, and stakeholder storytelling using dashboards and reports.

PROFESSIONAL EXPERIENCE

Data Scientist, Megh Computing	August 2020 – March 2023
<ul style="list-style-type: none"><li>Reduced AI inference latency by 40% by optimizing object detection pipelines using TensorRT and OpenVINO, enhancing real-time surveillance capabilities.</li><li>Improved anomaly detection accuracy by 25% through fine tuning YOLOv5 and Faster R-CNN models, facilitating quicker threat identification.</li><li>Enhanced deployment efficiency by 30% by engineering cloud-edge AI solutions on AWS and GCP, reducing operational overhead in bandwidth sensitive environments.</li><li>Increased system throughput by 60% via FPGA/GPU accelerated model pipelines, ensuring consistent performance for high volume video feeds.</li><li>Decreased integration time by 35% by leading the development of Megh's Video Analytics SDK, enabling clients to embed custom AI capabilities seamlessly.</li><li>Streamlined post-deployment monitoring by automating CI/CD driven performance benchmarking pipelines, cutting debugging cycles by 50%.</li><li>Delivered tailored AI solutions across retail, finance, and smart city sectors, aligning deployments with sector specific KPIs.</li><li>Led technical onboarding processes, establishing knowledge transfer frameworks that reduced new hire ramp up time.</li></ul>	

TECHNICAL SKILLS

<ul style="list-style-type: none"><li><b>Programming:</b> Python (pandas, scikit-learn, TensorFlow, PyTorch, NLTK, SpaCy), R, SQL, PySpark, Java, C++, C</li><li><b>Machine Learning &amp; Modeling:</b> Predictive Modeling, Classification, Regression, Anomaly Detection, Time Series Forecasting, Statistical Process Control, Model Evaluation (BLEU, Perplexity), Hyperparameter Tuning</li><li><b>Data Science &amp; Analytics:</b> Exploratory Data Analysis (EDA), A/B Testing, Statistical Analysis (ANOVA, Chi-Square), Feature Engineering, Data Storytelling, Experimental Design</li><li><b>Cloud &amp; DevOps:</b> AWS (EC2, S3, SageMaker), GCP, Docker, CI/CD, Git, Databricks, Snowflake</li><li><b>Data Engineering &amp; Databases:</b> ETL/ELT, Data Modeling, Airflow, Apache Spark, Performance Optimization, Large-Scale Data Processing, PostgreSQL, MySQL, MongoDB, Redis</li><li><b>Data Visualization &amp; Reporting:</b> Power BI, Tableau, ArcGIS, ArcGIS StoryMaps, JMP Pro, Dashboards, Reporting Automation</li><li><b>Natural Language Processing:</b> Text Classification, TF-IDF, Sentiment Analysis, LLM Integration (CodeGen2), Transformers</li></ul>	
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EDUCATION

Master of Science in Data Science, Rochester Institute of Technology	May 2025
Bachelor of Engineering in Information Science and Engineering, BNM Institute of Technology	August 2020

PROJECTS

<b>Autonomous Vehicle Safety (Explainable AI)</b>   <i>Python, OpenCV, TensorFlow, CRAFT, TCAV</i>	
<b>Collaborators:</b> Toyota Research Institute, University of Florida, University of California Irvine	
<ul style="list-style-type: none"><li>Developed XAI pipelines using CRAFT and TCAV to interpret object detection models in autonomous vehicles.</li><li>Reduced false positive braking events by providing model transparency, improving safety critical decisions.</li><li>Enhanced pedestrian detection accuracy, contributing to safer AV navigation systems.</li></ul>	
<b>Statistical Analysis of Online Sales Data</b>   <i>Python, Pandas, SciPy, ANOVA, Chi-Square</i>	
<ul style="list-style-type: none"><li>Applied regression, ANOVA, and chi-square tests to identify significant sales trends and customer behavior patterns.</li><li>Delivered actionable insights supporting data driven marketing and pricing decisions, leading to improved revenue forecasting.</li></ul>	
<b>Marketing Strategy Optimization (GIS + Data Viz)</b>   <i>ArcGIS, StoryMap, Python, Data Visualization</i>	
<ul style="list-style-type: none"><li>Transformed raw marketing data into spatial insights using StoryMap, identifying high engagement zones and campaign gaps.</li><li>Drove improved customer targeting and regional strategy optimization, directly increasing marketing ROI and engagement rates.</li></ul>	

ACCOMPLISHMENTS

<b>Winner – SCB Business Analytics Competition 2025</b>	
<ul style="list-style-type: none"><li>Recommended Claude 3 as RIT's AI platform by evaluating LLMs (Claude 3, GPT-4, Mistral) across 7 strategic benchmarks, including cost, performance, privacy, and fairness.</li><li>Led technical analysis and stakeholder alignment, resulting in a first-place win for presenting a scalable, compliant AI roadmap tailored to higher education.</li></ul>	
<b>Published Research:</b> <i>Application to Detect Skin Cancer using CNN</i>   <b>IJLTET, 2020</b> — <a href="#">Link to Paper</a>	
<ul style="list-style-type: none"><li>Achieved 82% classification accuracy by developing and training a MobileNet based deep learning model for melanoma detection, leveraging dermoscopic image datasets to assist early clinical diagnosis.</li><li>Demonstrated real-world applicability by validating the model's performance against dermatological benchmarks.</li></ul>	