

UTKARSH GUPTA

utkarsh.gupta@duke.edu • (919)282-2533 • [Linkedin.com/in/utkarshgupta060702](https://www.linkedin.com/in/utkarshgupta060702)

EDUCATION

DUKE UNIVERSITY, The Fuqua School of Business

Durham, NC

Master of Science in Quantitative Management: Business Analytics, Risk

May 2025

Selected Coursework: Data Science for Business, Market Research Methods, Applied Statistics & Probability, Data Visualization & Storytelling, Data Infrastructure, Strategic Decision Analytics, Empirical Economic Analysis, Enterprise Risk Management, Fraud Analytics, Managing Cybersecurity Risks, AI/ML, Deep Learning, Neural Networks, Trend Analysis.

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

Chennai, India

Bachelor of Technology: Computer Science and Engineering – GPA 3.8

Jun 2024

Committee Head, Public Relations in Directorate of Student Affairs; Elected Co-Lead, Tedx Club.

Research paper: *Psychological Analysis Using Social Media Tweets* at IEEE 2024 3rd International Conference on Applied Artificial Intelligence and Computing.

SKILLS

Tools & Technologies: SQL, Python, R, Tableau, Power BI, Jupyter, Advanced Excel, Jira, DataBricks, AWS, Azure, GCP, Spark, HPC

Statistics & Analytics: Market Research, Survey Design, Consumer Insights, Healthcare Analytics, Strategic Insights, A/B Testing, Data Synthesis, Regression, Clustering, Hypothesis Testing, Predictive Modelling, Data Mining, Forecasting, Financial Reporting.

Certifications: AWS – Cloud Security Foundations, Oracle Academy – Database Foundations, IBM – Data Analysis with Python

EXPERIENCE

HCLTECH, Analytics Team

Noida, India

Data Analytics Intern

Jan – Jun 2024

- Utilized advanced analytics to derive strategic insights from Microsoft Bing search data, optimizing search algorithms, improving user engagement by 20%. Conducted analysis to inform strategic marketing decisions.
- Engineered robust data pipelines to automate ingestion, cleaning, and transformation for 100GB+ datasets, reducing processing time by 40% and **enabling real-time reporting and** insight generation.
- Designed, tested, and optimized complex SQL queries to extract, merge, and transform datasets from large-scale relational databases, reducing execution time by up to 25%.
- Built dynamic dashboards and visualizations in Power BI, translating complex datasets into **story-driven insights** for stakeholders; reduced processing time and strengthened data storytelling, boosting reporting efficiency by 30%.

SIEMENS LOGISTICS, IT

Gurugram, India

Operations Consulting Intern

May – Jul 2023

- Applied data-driven frameworks to analyze baggage system efficiency and operational throughput. Partnered with cross-functional teams to implement business strategy insights for automation solutions.
- Analyzed Basic Bag IQ system for tech integration, contributing to microservices-based deployments and enhancing accuracy and scalability by 14%.
- Deployed Java-based error detection and optimized database queries; deployed automated error detection algorithms, improving baggage throughput by 20% and reducing error rate by 15%..

SELECTED PROJECTS

Analyzing Psychological Traits Using Social Media Tweets (Python). Designed advanced LSTM and CNN models to analyze social media data, achieving 99.02% accuracy in identifying depression-related patterns. Developed system to support psychotherapy by examining behavioral changes. Analyzed tweet dynamics to uncover social factors influencing depression.

Detecting Brain Tumors (Python, OpenCV). Implemented advanced ML techniques HOG and SVM and medical imaging analysis to identify brain tumors from MRI and CT scans, ensuring high precision and reliability and maximizing accuracy to ~98%.

Capstone Project: Analyzing the Impact of Medicaid Expansion on Health Outcomes for Duke Health (SQL, R, Tableau). Led a data-driven analysis using SQL, R, and Tableau to assess Medicaid expansion's impact on NCDs. Synthesized multi-source healthcare data, applied predictive modeling, and delivered strategic insights to inform policy & highlighting care gaps.

ADDITIONAL INFORMATION

PR leadership Head for GirlUp Chouette, a part of the GirlUp Community leading public relations efforts, raising awareness for gender equality, and building partnerships with like minded organizations. National Level Skater.