




# Sai Sriya Vemuri

  |  sriya.vemuri@duke.edu | My Website

## EDUCATION

### Fuqua School of Business - Duke University, Durham, USA

Jul 2025 - May 2026

Master of Quantitative Management: Business Analytics

### SSN College of Engineering, Tamil Nadu, India

Jul 2019 - May 2023

Bachelors of Technology in Information Technology

## EXPERIENCE

### Citibank

Chennai, India

Jul 2023 - Jun 2025

#### Software Engineer (C10)

Aug 2024 – Jun 2025

- Built Ab Initio ETL pipelines to process 5 to 10 million daily credit card transactions, consistently meeting a sub 2 hour batch SLA for enterprise reporting
- Designed MySQL entity relationship models for reporting and analytics, improving query performance by 40% through indexing and normalized schema design
- Created region specific shell based testing pipelines and automation, reducing UAT cycle time from days to hours for new market onboarding
- Defined and tracked pipeline KPIs (batch duration, failure rate, late arrival rate), reducing on call triage time by 40% via clearer operational visibility
- Standardized Jenkins CI CD for data pipeline deployments (build, test, package, promote), reducing failed releases by 20% and improving release governance
- Built reusable Python modules for transformation, validation, and configuration driven runs, enabling 10 plus pipelines to share common logic and lowering maintenance effort by 25%
- Added unit tests and golden dataset comparisons for critical transformations, reducing regressions by 35% and improving data reliability across releases
- Improved data access patterns for reporting consumers by designing stable interfaces and documentation, reducing recurring ad hoc requests by 20% and supporting self serve analytics

#### Software Engineer (C09)

Jul 2023 – Aug 2024

- Integrated ISO 20022 CAMT message support end to end (ingestion, parsing, validation, transformation), increasing message coverage from 0 to 95% for the new format and improving data standardization across services
- Delivered a scalable Excel export pipeline for transaction analytics, supporting 50k plus rows per export with p95 export time under 10 seconds via streaming and pagination
- Built a transaction network style visualization graph to support analyst investigation, reducing ad hoc data pulls by 25% and improving self serve analytics
- Integrated Hadoop and Spark outputs into microservices APIs, improving data freshness from hourly to under 10 minutes for near real time decision support
- Partnered with stakeholders to define KPI metrics for liquidity events, standardizing metric definitions and reducing reporting discrepancies by 20%
- Improved throughput using Java concurrency controls and multithreading, increasing event processing capacity by 20

### Citibank

May 2022 - Jul 2022

#### Intern

Chennai, India

- Developed an internal tool to automate the upload and retrieval of objects from Amazon S3 cloud storage, reducing manual effort and processing time by 75
- Engineered Java, Spring Boot, and AngularJS components for JSON comparison and CSV diff generation, enhancing data validation processes and supporting 15 internal users in data analysis workflows

## SKILLS

**Technical Skills:** Python, SQL, MongoDB, Tableau, Kubernetes, Docker, Git

**Data Engineering Techniques:** ETL Pipelines, Data Warehousing, Data Quality Assurance

**Software Development Practices:** CI/CD Pipelines, Microservices Architecture, Unit Testing

**Analytical Methods:** Hypothesis Testing, A/B Testing, Statistical Modeling

## PROJECTS

### Lead Scoring & Funnel Analytics

*SpringBoot, MySQL, ML*

Designed a dashboard-ready REST API over 84k Salesforce leads to compute funnel conversion, velocity KPIs, and segmentation, plus rule-based and ML lead scores predicting PQL/launch/first shipment within 30/60/90-day windows.