

# Priyadharshan Sengutuvan

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## EDUCATION

### Northeastern University, Khoury College of Computer Sciences

Boston, MA

May 2026

Master of Science in Data Science

**Coursework:** Data Management, Cloud Computing, Distributed Systems, MLOps, Big Data Analytics, Algorithms

Coimbatore, India

### Sri Krishna College of Engineering and Technology

May 2023

Bachelor of Technology in Information Technology

**Coursework:** Big Data Analytics, DBMS, Cloud Computing, Distributed Systems, Data Mining

## SKILLS

**Programming:** Python, SQL, C#

**Data Engineering:** Apache Spark, Apache Airflow, PostgreSQL, SQL Server, ETL Pipelines, Data Modeling

**Cloud & Infrastructure:** GCP (BigQuery, Cloud Storage), Azure DevOps, Docker, CI/CD Pipelines

**ML Infrastructure:** MLOps, Model Deployment, Vector Databases, LangChain, FastAPI

**Tools & Frameworks:** Git, REST APIs, Microservices Architecture

## EXPERIENCE

### AriesView

Remote (Boston, MA)

Sept 2025 – Dec 2025

AI/ML Engineer Intern

- Scaled document processing throughput by architecting RAG pipeline infrastructure with PostgreSQL vector storage and Docker containerization for OCR-based document ingestion.
- Reduced data retrieval latency by 45% by designing optimized chunk-based indexing systems for real estate PDFs, enabling sub-second semantic search across 100K+ documents.
- Improved system reliability by implementing automated data validation pipelines and monitoring workflows for PostgreSQL databases handling financial modeling data.
- Accelerated feature deployment by establishing Docker-based development environments and CI/CD automation for data pipeline integration.

### Psiog Digital Private Limited

Chennai, India

Feb 2023 – Dec 2023

Software Engineer Intern

- Increased data processing efficiency by 25% by building automated ETL pipelines in C#/NET that extracted, transformed, and loaded operational data from multiple sources.
- Reduced dashboard query latency by redesigning SQL Server database schemas with optimized indexing strategies and implementing materialized views for frequent queries.
- Enhanced system integration speed by developing REST APIs that centralized data access across siloed backend systems, enabling real-time data synchronization.
- Improved deployment reliability by implementing CI/CD pipelines in Azure DevOps with automated testing and rollback capabilities for data infrastructure.

## ACADEMIC PROJECTS

### AI-Powered Operations Assistant with RAG ([GitHub](#))

- Processed 500K+ seller records daily by orchestrating Apache Airflow ETL pipelines with Docker containerization, ingesting data into GCP BigQuery for real-time analytics.
- Reduced data pipeline runtime by 60% by implementing parallel processing workflows and optimizing data partitioning strategies in BigQuery.
- Improved data availability by 50% by building automated data quality monitoring and alerting systems that detected and resolved pipeline failures within 15 minutes.

### BERT-based Sentiment Analyzer on Amazon Reviews ([GitHub](#))

- Processed 2M+ Amazon reviews by building scalable data ingestion pipelines with distributed preprocessing across multiple workers using Apache Spark.
- Reduced model training time by 35% by implementing efficient data loading pipelines with optimized tokenization batching and multi-threaded data preprocessing.
- Enhanced data pipeline reliability by implementing checkpoint mechanisms and retry logic for handling large-scale dataset processing failures.

### Credit Card Fraud Detection ([GitHub](#))

- Enabled real-time fraud detection by building streaming data pipelines that processed 10K+ transactions per second with sub-second latency using optimized feature engineering.
- Reduced false positive rate by 15% by designing feature stores with automated data quality checks and anomaly detection on high-dimensional transaction logs.
- Improved model serving reliability by implementing model versioning and A/B testing infrastructure for seamless deployment of fraud detection updates.