# **SANJANA PATNAM**

(857)605-1438 | patnam.sa@northeastern.edu | Boston, MA | LinkedIn | Github | Portfolio

#### **SUMMARY**

Data Analytics Engineering grad student skilled in cloud-native data pipelines, Python, SQL, AWS, and Databricks. Passionate about scalable analytics, team collaboration, and solving real-world data challenges.

#### **EDUCATION**

## Northeastern University, Boston, MA

May 2027

#### Master of Science in Data Analytics Engineering; GPA: 3.8/4

Relevant Coursework: Data Management, Data Computations and Visualization, Data Mining, and Machine Learning

### Geethanjali College of Engineering and Technology, Hyderabad, India

May 2024

## **Bachelor of Technology in Computer Science and Engineering**

Relevant Coursework: Data Structures, AI & ML, DBMS, Big Data Analytics, Cloud Computing, and Web Technologies

## **SKILLS**

Languages: Python, SQL, R

DevOps & Infra: Docker, Kubernetes, Terraform, Git

Cloud Platforms: AWS (S3, Redshift, Glue), GCP, Azure

Big Data: Apache Spark, Hadoop, Databricks

Orchestration: Airflow, Prefect, Jenkins

DevOps & Infra: Docker, Kubernetes, Terraform, Git

Testing: Pytest, Integration Testing, CI/CD validation

Monitoring: CloudWatch, Airflow UI, custom alerting

Streaming: Apache Kafka

Databases: MySQL, PostgreSQL, MongoDB Certifications: AWS DevOps (Advanced), HackerRank SQL

**Soft Skills:** Collaboration, Attention to detail, Communication

#### **WORK EXPERIENCE**

# Quadrant resources Pvt.Ltd., Hyderabad, India

May 2024 – Nov 2024

#### Web Data Analyst

- Managed ETL pipelines for NLP and search data to support AI model training workflows
- Annotated and processed over 5,000 records weekly, using transformation techniques that increased data precision by up to 20%
- Implemented basic monitoring logic and manual alerting scripts to flag data anomalies during ETL runs
- Collaborated with ML engineers and QA teams to maintain over 98% pipeline accuracy

#### 1Stop, Hyderabad, India

July 2022 - Sep 2022

## **Student Intern**

- Designed and optimized MySQL schemas and queries, boosting query performance by 20%
- Built and deployed an ETL-enabled e-commerce platform with real-time inventory and user management
- Integrated XAMPP stack for deployment and debugging, reducing platform latency by 25%
- Implemented basic CI/CD pipeline to automate testing and push fixes cycles in a small-team Agile environment.

## **TECHNICAL PROJECTS**

## Precision Oncology Data Integration and Analytics System, Northeastern University

April 2025

- Built SQL and NoSQL databases to integrate clinical, genomic, and imaging datasets
- Developed data pipelines using Python and Databricks on AWS for unifying heterogeneous data
- Designed **Power BI dashboards** for real-time KPIs on treatment outcomes, enabling clinicians to make data-driven decisions faster and **improving response time** to patient changes

#### **Automated University and Research Data Crawler**

March 2025

 Built a Python-based web scraper and deduplication pipeline for ranking university data using ETL workflows and citation-based metrics.

#### Patient Clustering for Medical Insights, Northeastern University

Feb 2025

- Built preprocessing pipelines and derived health indicators for clustering workflows, improving segmentation by 18%
- Built data visualization dashboards to validate clusters and assist with medical interpretation

## Fake News Detection, Geethanjali College of Engineering and Technology

March 2024

- Designed a scalable ML data pipeline using TF-IDF features and Logistic Regression for article classification
- Extended pipeline with ensemble models, achieving 90%+ accuracy and 0.85 F1 score for binary classification

#### **VOLUNTEER & EXTRACURRICULAR**

- Member, DAESO (Data Analytics Engineering Student Org) at Northeastern University
- Attendee, PyData Boston Al Agent & MCP Deep Dive Meetup (2025)