

AKSHITA SINGH

Boston, MA | +1 857-398-2479 | [Email](#) | [LinkedIn](#) | [GitHub](#)

EDUCATION

Master of Science, Data Analytics Engineering

Northeastern University, Boston, MA

Dec 2024

GPA: 3.9

Relevant Courses: Statistical Learning, Data Mining, Deep Learning, Machine Learning Operations.

Bachelor of Engineering, Information Technology

University of Mumbai, Maharashtra, India

Jun 2022

GPA: 3.8

Relevant Courses: Algorithms, Cloud Computing, Big Data Analytics, Software Development, Project Management.

TECHNICAL SKILLS

- **Programming Languages:** Python, R, C/C++, SQL, Cipher, Web (HTML, CSS, JavaScript).
- **Libraries:** Pandas, NumPy, Scikit-Learn, NLTK, TensorFlow, OpenCV, Langchain, Seaborn, Matplotlib, plotly.
- **Database/Data Warehouse:** RDBMS (MySQL, PostgreSQL), Neo4j, ETL/ELT, Data Modeling.
- **Tools:** Cloud (AWS, GCP), Git, DVC, Docker, Airflow, Mlflow, Tableau, PowerBI, LLMs (GenAI).

WORK EXPERIENCE

Graduate Teaching Assistant | *Northeastern University, Boston MA*

Jan 2024 - Present

- Collaborated with the professor to develop course materials and assignments.
- Mentored 40+ students through one-on-one support, led weekly R programming labs.

Data Assistant | *Northeastern University, Boston MA*

Jan 2024 - May 2024

- Meticulously generated precise reports and data for 10,000+ graduates for software integration.
- Developed dashboard with essential KPIs facilitating commencement event management & planning for 8 colleges.

Data Engineer | *Beam Therapeutics, Cambridge, MA*

Jul 2023 - Dec 2023

- Collaborated with cross-functional teams and CROs to analyze and optimize existing data processes.
- Engineered data pipelines to transfer 4 years of CRO data to company servers, enhancing data accessibility.
- Spearheaded solutions to enhance data flow efficiency, ensuring increased security and compliance.
- Created custom protocols and workflows, streamlining data processing by 40% and saving 25% time.
- Implemented data pipelines and utilized APIs to integrate data with third-party applications, enhancing usability.

Data Analyst | *Sahu Technologies, Mumbai, IN*

Jan 2022 - Jul 2022

- Leveraged SQL to extract and manipulate data from large-scale relational databases.
- Delivered comprehensive and visually engaging data dashboards and reports using Tableau.
- Employed Python-based solution to automate weekly KPI reporting, resulting in a 10% reduction in reporting time.

PROJECTS

AI Powered Knowledge Graph Creation and Chatbot | *LLM, Python, Neo4j*

- Leveraged LLM and prompt engineering to generate knowledge graphs from unstructured and semi-structured data.
- Developed custom functionality to automate Cypher query generation for populating Neo4j database.
- Developed a Streamlit-based chatbot that provides answers to user queries and corresponding cypher query.

Brain Tumor Classification | *Docker, Airflow, MLflow, GCP, Tableau, Python*

- Implemented an end-to-end pipeline for detecting and classifying brain MRI images in 10 seconds.
- Automated data preprocessing, model training, and retraining pipelines with Apache Airflow boosting efficiency.
- Orchestrated CI/CD workflows on GCP via GitHub Actions to build, deploy application, ensuring seamless deployments.
- Parsed log data with regex, stored in PostgreSQL, and built Tableau dashboard for real-time system monitoring.

Emotion Based music player | *ML, Deep Learning, Web development*

- Engineered a music recommendation system that detects real-time emotions, utilizing OpenCV algorithms.
- Optimized model robustness and achieved 87% accuracy through data augmentation techniques.
- Developed an intuitive UI with HTML, CSS, and JavaScript, providing a user-friendly experience.

YouTube Content Data Analysis for Marketing | *AWS, Data modeling, Tableau*

- Constructed robust data lake on S3, integrating 10+ semi-structured, structured datasets from YouTube content.
- Streamlined data transformation and ingestion processes using custom scripts, improving workflow efficiency.
- Improved query performance through data partitioning & communicated insights via impactful Tableau dashboards.