

TEJODHAY BONAM

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EDUCATION

Northeastern University, Khoury College of Computer Sciences

Boston, MA

Masters in Data Science

GPA – 3.8

Sep 2022 - Dec 2024

Coursework: Supervised & Unsupervised Machine Learning, Data Engineering, DBMS, NLP, Algorithms, LLM

Sri Sathya Sai Institute of Higher Learning, BS Mathematics & Computer Science (2021)

Bengaluru, KA

Activities: Institute Brass Band - Headed the Western Flute section of the prestigious Institute Brass Band at SSSIHL

SKILLS

Programming & Query Languages: Python, R, Java, JavaScript, C, HTML, CSS, SQL, NoSQL, GraphQL

Libraries & ML Frameworks: Tensorflow, Keras, PyTorch, Pandas, NumPy, Scikit-Learn, matplotlib, OpenCV, LangChain

Predictive models: Linear & Logistic Regression, SVM, Decision Trees, Random Forest, XGBoost, K-Means, Neural Networks

Databases: AWS S3, RedShift, MS SQL Server, MySQL, Azure Blob Storage, Azure SQL Database, Snowflake, MongoDB

Software and Tools: Apache Kafka, Spark, Airflow, Docker, Salesforce CRM, Microsoft Excel, Microsoft Power BI, Tableau, SSIS, SSRS, Agile, Scrum, GitHub Actions, CI/CD, BigQuery, Databricks, SageMaker, Azure DevOps, MLFlow, Kubernetes

PROFESSIONAL EXPERIENCE

➤ Accenture

Application Development Associate (Data Engineer)

Mar 2022 – Sep 2022

Hyderabad, India

- As part of a top-performing 5-member Agile (Scrum) team, I actively interacted and collaborated with development team to deliver 3 projects on time and within budget, implementing best practices to improve the code modularity.
- Engineered & optimized an ETL data pipeline using Python, Airflow, Spark and SQL to ingest OLAP data from 10+ sources into enterprise Redshift data warehouse, enabling data integrity checks on 120M+ rows to enhance data quality and reliability.
- Developed real-time QuickSight & Power BI dashboards providing clients with 30% faster access to critical business insights.
- Collaborated with cross-functional teams to integrate data analytics capabilities into existing applications and enthusiastically participated in work group/team activities as a positive and dependable team member.

Arthashastra Intelligence

Data Science Intern

Sep 2021 - Mar 2022

Hyderabad, India

- Revamped data architecture to migrate data incrementally from an on-premises database to a cloud-based AWS database ensuring seamless integration and reduced overall data migration time by 20% writing multiple SQL stored procedures.
- Implemented a data pipeline using AWS Glue and set up Glue Crawlers to automate schema discovery and Glue Jobs for processing and transforming raw data into structured formats for further analysis.
- Worked with 2 other interns and data scientists to build & train scalable machine learning models on AWS SageMaker.
- Accelerated report generation by 35% enabling streamlined data access by creating a data lake using AWS Athena.
- Synthesized large amounts of data into succinct actionable insights to 10+ stakeholders (technical & non-technical) using data visualizations and self-service analytical Power BI reports with integrated views to empower data-driven decisions.

Khoury College of Computer Sciences

Graduate Teaching Assistant

Sep 2023 – Dec 2023



Boston, MA

- Supported 200+ students in key ML concepts – (data exploration, data cleaning, model interpretability, model optimization, hypothesis testing) through scheduled office hours & programming assistance, Graded assignments, discussions and exams, Managed content on Gradescope & Canvas like adding new assignments, quizzes and uploading class recordings to Cloud.

PROJECTS



Microsoft - Future Ready Talent

Feb 2022 – Mar 2022




-  **Fashion Visual Search Web app** (Azure Computer Vision, Azure Cognitive Search, Azure Open AI, Speech Services)
An interactive web app that utilizes vector embeddings to create an efficient and accurate visual search index along with UMAP analysis to search for apparels based on their visual features, such as color, pattern, or texture.
-  **Facial Emotions based Music Recommendation System** (Face API, K-Means clustering, segmentation, object detection)
The project works by getting live video feed from web cam using OpenCV, pass it through the model that detects facial emotions. Accordingly, the app will rank the recommended songs employing K-means clustering and displays them on screen

Northeastern University, Data Engineering & NLP course projects

Sep 2022 - Dec 2023

-  **Analyzing U.S. nationwide temperature from IoT sensors in real-time:** Sensors send data to Kafka server in AWS Cloud Kafka client retrieves the streaming data every 3 sec, PySpark processes and analyzes data in real-time using Spark Streaming
-  **LLM based Q&A system for T-shirts Retail store:** User asks questions in a natural language and the system generates answers by converting those questions to an SQL query and then executing that query on MySQL database.
(Google PaLM, LangChain, MySQL, Chromadb as vector store, Hugging Face embeddings, Few-Shot learning, Streamlit UI)

Portfolio Projects

-  **Videos Analysis Data Engineering Project:** Python, S3, AWS Glue, AWS Lambda, AWS Athena, SQL, QuickSight
- Competing in the Mental Wellness iOS App Market** (NLP): Extracted insights for designing a new mental health mobile app
-  **Healthcare Data Pipeline:** Sourced 10GB Medicare data, PostgreSQL, S3, MySQL on RDS, Spark on EMR, Power BI
- Language Labs:** Word Cloud, N-Gram Analysis, Spam Classifier, Sentiment Analysis, Text Summarizer, POS Tagging, NER
-  **Uber Analytics Data Engineering project:** GCP, Compute Instance, Mage Data Pipeline, BigQuery, Looker Studio

CERTIFICATIONS

- AWS Data Engineer Associate (TBC)
- Microsoft Azure Data Engineer Associate (TBC)
- AWS Cloud Practitioner