

Adithya Narayan

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Profile

Motivated MS CS graduate from Northeastern University with strong collaboration and technical presentation skills with over 2 years of experience working in Shell Oil and Series B setups. Proficiency in Python, SQL, Data Engineering, Cloud dataset management, Clustering, and tree-based XAI methods. Extensive experience in building internal analytics dashboards, ETL pipelines, and Hypothesis testing experiments.

Education

Northeastern University - Khoury College of Computer Sciences – Boston, MA

Master of Science in Computer Science, May 2024

Ramaiah Institute of Technology – Bangalore, India

Bachelor of Engineering in Information Science, June 2020

Experience

Machine Learning Engineer, Bear Brown LLC – Boston, MA July 2023 – Present

- Improved response relevancy by 50 % by deploying an end-to-end RAG Model using Transformer embeddings obtained from parsing over 1,000 PDF's with ETL pipelines built using GCP and Python
- Reduced average user query handling time by over 70 % by deploying the fine-tuned LLM into production as a secure, scalable chatbot using React, AWS, and Flask, and implementing response caching using Redis
- Tools Used: LangChain, LLMs, Transformer Models, GCP, React, AWS, Redis, Flask

Machine Learning Research Engineer, Skit – Bangalore, Karnataka, India Dec 2021 – Aug 2022

- Increased speech recognition accuracy by over 20 % for five clients by using Gaussian Mixture Clustering and Expectation Maximisation training for acoustic modelling on large audio datasets stored on AWS S3
- Increased customer resolution rate for over 5 million users by 30 % using hypothesis testing for conversation strategy comparison, moving data from Redshift to PostgreSQL to build dashboards on Metabase
- Tools Used: Python, PostgreSQL, Scikit Learn, Clustering, GitHub CI/CD, AWS Redshift, Kubernetes, Docker

SDE - Machine Learning (Contract), Stride.ai – Bangalore, Karnataka, India May 2021 – July 2021

- Trained and deployed an explainable decision tree-based Named Entity Extraction service serving over 10 public schools, achieving an F1 score of over 0.8
- Designed a Hybrid Deep Learning - Bounding Box Regression network for handwritten PDF object extraction, using Spark for large document dataset preprocessing for over 10,000 documents on the cloud.
- Tools Used: Python, Scikit Learn, Decision Trees, Deep Learning, Keras, GitHub CI/CD, AWS, PySpark

IT Software Engineer, Shell – Bangalore, Karnataka, India Sep 2020 – May 2021

- Designed and built an internal analytics dashboard to investigate cash flow analytics between international banks and Shell, using PostgreSQL, SAP Data Warehouse, and SAP Report Visualization Services to query over 100+ GB daily for over 500 multinational users across non-technical Finance and HR teams
- Delivered PowerPoint presentations and wrote a technical white paper on building reporting interfaces for cash flow analytics, that allowed developers to reuse existing query logic for setting up cash-flow dashboards
- Tools Used: PostgreSQL, Dashboards, Object Oriented ABAP, SAP Data Warehouse, Powerpoint

Academic Projects

PaperGraphr <https://adinarayanb.github.io/ConfGraphDataViz/>

- Developed a visualization tool using D3.js and Spark that analyzes graphical relationships between over 300 academic conferences, resulting in an interactive graph with over 1,000 nodes and 5,000 edges.

Skills

Deep Learning: Transformers, LLM, PyTorch, TensorFlow, CNN, Seq2Seq, RNN-LSTM, YOLO-v5, Gen AI

Data Analysis: Pandas, NumPy, Scikit-Learn, Matplotlib, Hypothesis Testing,

Backend: PostgreSQL, MongoDB, Microservices, Django, AWS, Redis, ETL Pipelines

Orchestration/Data: Kubeflow, Kafka, Kubernetes, Airflow, Spark, Docker, GitHub Actions