ADIT SHRIMAL

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EDUCATION

M.S. in Data Science, University of San Francisco

Jul 2022 - Present

Relevant Coursework: Machine Learning, Linear Regression, A/B Testing, Distributed Computing (Spark), Relational Databases (SQL), NoSQL, MLOps, Data Engineering (Kafka, Hadoop, HBase, Hive, Spark, ETL, Schema design and Dimensional Data Modeling)

B.E. in Computer Engineering, University of Mumbai

Jul 2015 - May 2018

Relevant Coursework: Data Structures & Algorithms, Computer Networks, Machine Learning

PROFESSIONAL EXPERIENCE

Amazon Web Services

Nov 2022 - Present

Machine Learning Intern

- Designed and implemented Recurrent Neural Networks (RNNs), specifically the GRU4Rec model, using PyTorch and the ReChorus library for advanced sequential recommendation tasks.
- Utilized **SHAP** and **KernelSHAP** to explain model predictions and identify features with the highest impact on recommendations, improving **model interpretability**.
- Integrated **TimeSHAP** to provide time-based explanations of recommendations, enabling users to understand better why specific items are being recommended at a given time.

Fractal Analytics Nov 2021 - Jun 2022

Data Engineer

- Designed **data-driven solutions** for client enterprise data warehouses using **GCP** (Google Cloud Platform) products (Composer, Dataflow, BigQuery, Cloud Storage), increasing data processing efficiency.
- Implemented an end-to-end data encryption strategy with Google Tink and KMS, reducing security incidents and ensuring compliance with data protection regulations.
- Won Star Award 2022 for delivering outstanding solutions and solving complex technical challenges.

Bewakoof Brands Pvt. Ltd. Feb 2020 - Nov 2021

Data Scientist

- Constructed a cost-efficient **GCP** data pipeline (**40%** cost reduction) with improved scalability and fault tolerance
- Devised a **product ranking** auto-sort algorithm, boosting CTR (click-through rate) by **26**% and A2C (add-to-cart rate) by **12**%.
- Optimized personalized recommendations employing **ALS** (used implicit ratings), resulting in a significant **14%** increase in RPTI (revenue-per-thousand impressions).
- Developed a system to send bulk **emails** using Amazon SES with a **10x ROAS** (return-on-ads-spend) leveraging **RFM** (Recency-Frequency-Monetary) **segmentation** for user base selection.
- Recognized as Employee of the Month for October '20 and Employee of the Quarter for Q4 FY 20-21.

Reliance Jio Jul 2018 - Feb 2020

Data Engineer

- Built a **streaming data pipeline** using Kafka, Flink & Elasticsearch, handling millions of events in real-time and outperforming existing pipelines with a lag of over two hours.
- Constructed a **data warehouse** with HDFS, Spark, and Cassandra, enabling systematic computational analysis for Product Managers and Leaders.
- Automated raw data compression (80% reduction) in Hadoop Cluster using Airflow, Spark, and MySQL, ensuring storage capacity remained below 20% and optimizing external storage.

TECHNICAL SKILLS

- Programming Languages: Python, Java
- Databases: MySQL, MongoDB, Cassandra, Elasticsearch
- Big Data & Cloud: Kafka, Spark, Flink, HDFS, Airflow, GCP (Pub/Sub, BigQuery, Dataflow, Key Management Service, Cloud Functions), AWS (Kinesis, S3, Lambda, Redshift, Glue, Athena)
- Machine Learning: Linear Regression, Logistic Regression, Decision Trees, Random Forest, Kmeans, Gradient Boosting Machines (XGBoost), SVD, PCA, Collaborative Filtering (ALS), Feature Engineering, and Model Evaluation
- MLOps: MLFlow, Data Version Control (DVC), CI/CD, Docker, Kubernetes, API design (Flask)