SAGAR RUDAGI

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PROFESSIONAL EXPERIENCE

Prodapt North America Inc | Client: **Verizon** - **Software Engineer** **May 2024 - Present**
Irving, Texas

- Partnered cross-functionally with operations and finance teams to gather requirements and uncover automation opportunities, resulting in reduced manual effort and increased operational efficiency aligned with strategic business needs
- Engineered robust monitoring solutions using **Shell** scripting, **Prometheus**, and **Grafana** to proactively detect server downtimes, traffic anomalies, and resource bottlenecks—supporting business continuity and timely incident response
- Streamlined deployment pipelines through **Jenkins** and **Ansible** automation, cutting deployment time significantly and boosting reliability of core financial applications
- Designed **Jenkins** automation to terminate non-essential processes, optimizing performance and preserving uptime for critical workloads
- Automated ticket-based operational workflows by scripting dynamic request handling processes using **Selenium**, enabling frictionless user access management across enterprise systems with complete auditability
- Ensured integrity and consistency of telecom data streams from multiple vendors, facilitating the accurate delivery of business KPIs and supporting downstream analytics
- Remediated data inconsistencies by building logic to re-ingest vendor data, ensuring completeness and accuracy critical to KPI tracking and performance analysis
- Resolved complex data anomalies during multi-source transfers and aggregation, safeguarding data quality and reliability

TE Connectivity Services India Pvt Ltd – Data Insights and Analytics Engineer **Jan 2021 - July 2021**
Bangalore, India

- Spearheaded Cloud Migration Project from migrating 60-70% data to AWS Redshift resulting in 40% increase in query performance
- Restructured raw data from SAP Hana and Oracle Runtime Database using MySQL, Cassandra, and Hive enhancing data accuracy by 60%
- Authenticated large databases over 5 million records utilizing AWS Athena, S3 and Excel to rectify inaccuracies with a success rate of 98%
- Automated the manual validation process through pipelines using Python reducing the time from 10 hours/day to a few seconds
- Administered CI/CD pipelines using AWS CodeBuild, AWS CodePipeline, and Jenkins for continuous deployment of validated datasets

TECHNICAL PROJECTS

Movie Recommender System - Ollama, FAISS, NGROK **September 2025**

- Designed a full-stack movie recommender (Python) that preprocesses 5 catalogs (Netflix, Amazon, Hulu, Disney, combined “all”) and indexes ~22,998 titles into persisted FAISS vector stores for sub-second similarity search
- Built a reusable backend pipeline that generates L2-normalized embeddings via a local Ollama model, which helps for on-demand querying
- Optimized embedding workflow and query latency by replacing an O(N) per-item embedding loop with a single-query embed + FAISS search, eliminating ~23k external model calls and reducing recommendation preparation from minutes to seconds
- Developed a Streamlit frontend that presents the details and similarity score for recommendations and integrates with the backend for production-ready demos and local sharing via ngrok
- Automated start script and documented ngrok hosting and Ollama considerations, and applied Git troubleshooting & environment fixes — demonstrating practical skills in deployment, debugging, and reproducible demos

Quora Question Pairs Similarity - Arizona State University **December 2021**

- Leveraged Matplotlib to design comprehensive visual plots resulting in a 20% improvement in accuracy of class distribution analysis
- Operationalized Spacy to vectorize data for feature extraction, reducing processing time by 35% and improving model performance by 15%
- Implemented data preprocessing techniques such as tokenization and stemming to ensure 99.9% data quality
- Collaborated to develop an innovative feature engineering method that amplified model accuracy by 12%
- Tested various predictive models such as Logistic Regression, SVM, and Gradient Boosted Decision Trees, with the latter outperforming the others with an accuracy of 79.29%, reducing error by 20%

SKILLS

Technical skills: Automation, Data Handling and Visualization, DevOps, Exploratory Data Analytics, Predictive Analytics and Modeling, Dashboarding
Frameworks and Tools: Python, MySQL, Jenkins, Ansible, Grafana, Tableau, Looker, Spark, Tensorflow, FastAPI, GCP BigQuery
Certifications: Deep Learning Specialization (deeplearning.ai), Google Advanced Data Analytics, Data Visualization with Tableau (UC Davis), Creating Business Value with Data and Looker, Google Cloud Professional Data Engineer Certification (in-progress)

EDUCATION

Master of Computer Science **August 2021 – May 2023**
Arizona State University Tempe, AZ
Coursework: Data Mining, Data Processing at Scale, Data Visualization, Intro to Deep Learning, Natural Language Processing

Bachelor of Engineering in Computer Science (BE) **August 2017 – May 2021**
BMS College of Engineering Bangalore, India
Coursework: Python, Database Management Systems, Neural Networks, Big Data, Artificial Intelligence, Data Science