Adithya Narayan

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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

SDE, Bear Brown LLC – Boston, MA   July 2024 – Present
- Developed a scalable Python ETL pipeline using Google Cloud, parsing and analyzing 1,000+ NGO websites, aiding in LLM finetuning
- Designed and deployed an OAuth2-enabled full stack LLM chatbot into production using React and AWS
- Implemented a scalable LLM querying REST API with question-response caching using Redis and Flask
- Ensured 99%+ test coverage by setting up automated CI/CD pipelines with GitHub Actions and PyTest

Software Engineer, Skit – Bangalore, Karnataka, India   Dec 2021 – Aug 2022
- Used Kubeflow to build pipelines for speech recognition model benchmarking, enabling data scientists to test their models in a matter of hours instead of days
- Developed a Cobra CLI tool using Go Routines to build parallel audio preprocessing pipelines for large datasets (300 GB) on AWS S3, reducing manual efforts in model training setup by over 30%
- Wrote an A/B testing library using SQL, Metabase, and SQLAlchemy, increasing resolution rates by 20% across 3 clients while abstracting complex join and window queries

Software Engineer, Stride.ai – Bangalore, Karnataka, India   May 2021 – Jul 2021
- Developed Django microservices to process handwritten PDFs for over 10 million users using Kafka Producer-Consumer architecture, ensuring 99%+ test coverage with GitHub Actions
- Built a PDF annotator using React PSPDF and MongoDB, reducing annotation time by 3 hours on average for over 500 legal documents by increasing image and text metadata available per annotation
- Wrote an internal JSON-XML annotation conversion tool using Abstract Syntax Trees, saving 5+ hours per use case by normalizing format schemas into a singular format for downstream image processing tasks
- Implemented DAG Pipelines in Airflow for large image dataset preprocessing, denoising and cleaning over 10,000 documents stored on S3, ensuring high quality image datasets for downstream modeling

IT Software Engineer, Shell – Bangalore, Karnataka, India   Sep 2020 – Apr 2021
- Built SAP and SQL based reporting interfaces for cash transfer regulatory services and reporting, querying 100+ GB for 500+ users across Global Finance/HR teams, and ensuring near 24/7 uptime
- Developed a full-stack app using REST-based OData and SAP UI5.js to monitor real-time updates from Shell Retail, enhancing monitoring of over 1,000 products

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.
- Implemented data filtering and interactive features, including a search function, dynamic node selection, and real-time relationship strength adjustments. Deployed on Github Pages and Docker for ease of use.

Skills

API Frameworks and Databases: React, Django, Flask, FastAPI, OAuth2, PyTest, PostgreSQL, MongoDB, Redis
Cloud: AWS (S3, EC2, Lambda, SQS, ECR, ECS, Glue), GCP
DevOps/Observability: GitHub Actions, Docker, Terraform, Elasticsearch, Logstash, Kibana
Orchestration/Data: Kubeflow, Kafka, Kubernetes, Airflow, Spark
Machine Learning: LLMs, Computer Vision (OpenCV), NLP (NLTK), PyTorch (CNN, RNN-LSTM, Seq2Seq)