Svadrut Kukunooru

kukunoorusvadrut@gmail.com | linkedin.com/in/svadrut | github.com/svadrutk

SUMMARY

AI engineer building production LLM systems that save $2M+/yr at Wayfair and scale to 1k+ concurrent users. Proven RAG + evaluation + infra stack; AWS Developer Associate certified. Strong interest in applied ML and agentic workflows.

PROFESSIONAL EXPERIENCE

Wayfair   Boston, MA
Software Engineer, Knowledge Management   *Jan 2024 – Present*

- Collaborated directly with Google's engineering team to deploy an AI-driven knowledge retrieval system that deflected 50K/73K (**70%**) Talent org ServiceNow tickets, **saving $2M annually** in support costs.
- Architected fault-tolerant, low-latency session management system supporting 1K+ concurrent users using in-memory caching and Firestore for resiliency.
- Built analytics pipeline ingesting 10K+ LLM user turns; enabled scalable evaluation and model behavior insights using BigQuery and internal tools.
- Created unsupervised ML pipeline with BERTopic and K-Means to generate representative queries for regression testing across support verticals.
- Evaluated LLM performance using metrics such as hallucination rate, groundedness, and precision/recall via LLM-as-a-judge pipeline; informed prompt iterations and regression testing.

Wayfair   Boston, MA
Software Engineering Intern, Legal Tech   *Jun 2023 – Aug 2023*

- Developed and pitched Waybor, an AI-powered assistant converting CAD models to multimodal step-by-step assembly guides; **won Intern Innovation Challenge** (1st of 40+ teams).
- Built Spring Boot APIs enabling real-time rule validation for **10K+** supplier products, automating compliance workflows.

PROJECTS

Campusfy | *Python, Next.js*   Feb 2024 – May 2024

- Secured 1K+ active users and 5K+ course views in first 2 months with RAG-based academic advisor interpreting queries like "easy CS electives" to surface courses from 20K+ academic listings.
- Implemented vector search using Google's `gemini-embedding-001` model and custom difficulty heuristics.
- Built reranker to improve course recommendation relevance using weighted signals from user engagement (e.g., clicks, saves, feedback).

TECHNICAL SKILLS

AI/ML: LLM Evaluation, Embedding Models, Prompt Engineering, RAG, Vector Search, Google ADK
Languages: Python, JavaScript/TypeScript, SQL, R, Bash
Frameworks/Libraries: Flask, FastAPI, Docker
Cloud/Infra/Data: AWS (Certified), GCP, BigQuery, Supabase, Airflow, Terraform
Tools: Git, REST APIs, Looker

EDUCATION

University of Wisconsin – Madison   Madison, WI
Bachelor of Science in Computer Science, Minor in Data Science   *2021 – 2024*