

Vinay Kudari

seeking a team that thrives on complex problems and candid, idea-driven dialogue

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RELEVANT SKILLS

Python, SQL, FastAPI, LangGraph, PySpark, PyTorch, Hugging Face, Kubernetes, Redis, Snowflake, GCP, AWS

EXPERIENCE [6+ YRS]

- **Apple** Cupertino, CA
Machine Learning Engineer | **workflow-automation, mcp, k8s, agents, fine-tuning** July 2024 - Present
 - Built an enterprise NL→SQL pipeline: RAG + schema linking → FSDP-fine-tuned 7B planner emits a grounded JSON query plan → frontier model compiles production SQL → critique loop validates/repairs via zero-scan checks.
 - Delivered a policy-aware invoice intelligence system that parses receipts, enriches with Snowflake policy data, and runs evidence-backed validations to automate “read–query–verify–sign” for 10K+ invoices/month
 - Designed a deep-research finance analyst agent that turns natural language into dashboards and slide decks—retrieving from databases/flat files to generate evidence-backed insights, visualizations, and cited narratives with grounding
- **Gap Inc** San Francisco, CA
Software Engineer | **java, spring, graphql, azure, kafka, kubernetes, llm** July 2023 - June 2024
 - Spearheaded a real-time personalization engine development, leveraging extensive datasets to optimize user experiences and drive significant engagement and sales enhancements.
 - Engineering a low-latency LLM-based information retrieval system to extract data from multi-source document corpus
- **Amazon Web Services** Palo Alto, CA
Software Development Engineer | **spark, athena, dynamo, glue, lambda, cdk** Dec 2022 - June 2023
 - Designed and published an internal query builder python package (ZenQL) tailored for AWS Healthlake
 - Designed an event-driven server-less system using AWS services, allowing for parallel execution of tasks, resulting in seamless scaling to handle concurrent requests and improved processing throughput
 - Designed and optimized complex SQL queries in Athena resulting in a 40% reduction in query execution times
 - Architected near real time data processing system using AWS CDK, leveraging PySpark for ETL transforms on multi-terabyte healthcare data sets
- **Playstation** San Francisco, CA
Software Development Intern | **kafka, concurrency, async, no-sql, cassandra** May 2022 - Dec 2022
 - Worked on auto follow feature for PS5 Explore Hub. Message queues and REST endpoints were developed
 - Learned custom framework and leveraged asynchronous programming pattern to optimize the latency by 60%
 - Developed a cross platform CLI tool to automate generation of grafana analytical dashboards from logs
- **Brave Orbit (early stage startup)** Capetown, South Africa
Founding engineer | **rest-api, django, flutter, pytest, redis, docker, gcp** Jan 2020 - Aug 2021
 - Programmed a cross-platform app using BLoC pattern, implemented database, network and state management layers
 - Engineered HIPAA compliant scalable async push notification service for medication reminder application
 - Developed a task scheduler for clinical surveys that delivers email, SMS alerts and gathers response on a recurring basis
 - Architected a custom ERP system with multi-product substitutions and combo-product life cycle tracking features
- **Accenture** Bangalore, India
Big Data Developer | **redshift, pyspark, emr, etl, s3** Sep 2018 - Dec 2019
 - Performed time series analysis on drug assay data to identify raw materials that effect the drug quality
 - Designed ETL data validation pipeline using micro service architecture; Manual testing resources were cut by 70%
 - Developed PL/SQL procedures to generate parent child hierarchies using temporal drug life cycle data

PROJECTS

- **Pixie:** Built in 6 hours at the Nano Banana Hackathon; enables selective edits on live website screenshots or mockups using natural language or voice, with multi-model generation and real-time canvas updates
- **Friend (@mydawg_bot on telegram):** Building a multi-agent AI companion with human-like memory simulation, capable of personalized conversations, context-aware recall, and tool use
- **Stocklerts:** Built a self-evolving system that analyzes real-time news to recommend stocks for day trading; adapts prompts weekly based on ground-truth top performers to refine future predictions
- **Open-source contributions:** Contributor to HuggingFace Datasets official repository

EDUCATION

- **University at Buffalo [3.9/4.0 GPA]** Buffalo, NY
Master of Science in Computer Science (AI/ML Specialization)
Research: Finding inconsistency between text and related images, advised by Prof. David Doermann
- **National Institute of Technology, Durgapur [3.3/4.0 GPA]** West Bengal, India
Bachelor of Technology in Computer Science and Engineering
July 2014 - May 2018