Aditya Ghanashyam Ladawa

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TSO-DATA

Application: Software Developer for AI Agents

My work as an AI and backend engineer centers on building scalable, autonomous systems that deliver measurable value. I am writing to express my interest in the Software Developer for AI Agents position, where the focus on intelligent process automation and multi-agent architectures aligns directly with my expertise in designing and deploying self-replacing agentic systems. My approach prioritizes robust, production-ready solutions over conceptual demonstrations, ensuring long-term leverage and absolute control over execution environments.

- Agentic System Architecture: I specialize in developing deterministic multi-agent workflows using LangGraph, LangChain, and LangSmith. My experience includes orchestrating explicit state control, memory management, and persistent, asynchronous execution for systems that autonomously handle complex tasks like document retrieval, multimodal processing, and insight generation. Projects such as the AI-Powered Reels Pipeline and AI Research Assistant demonstrate my capability in building fully automated, agent-driven content pipelines that significantly reduce manual overhead and achieve high throughput.

- RAG and Backend Integration: I possess strong experience in integrating Retrieval-Augmented Generation (RAG) into data landscapes, utilizing Qdrant and FAISS for efficient knowledge retrieval. My backend engineering stack, centered on Python and FastAPI with Postgres, Redis, and MongoDB, ensures modularity, testability, and production readiness for scalable AI solutions and API integrations.

- Technical Fluency and LLM Integration: My programming expertise in Python is complemented by hands-on experience with various LLM technologies, including OpenAI APIs, Google Vertex AI, and DeepSeek. I develop models using TensorFlow, PyTorch, and scikit-learn, integrating them into end-to-end pipelines without black-box reliance, ensuring full control over the system's behavior and output.

- System Ownership and Automation: My philosophy treats inefficiency as a structural failure, driving me to build systems that scale and generate recurring value without oversight. I am deeply committed to automation pipelines and infrastructure logic, as evidenced by my DevOps workflows involving Docker, Git, and CI/CD pipelines for reproducible, high-uptime deployments on GCP.

My resume, available at https://github.com/aditya-ladawa and https://www.linkedin.com/in/aditya-ladawa/, provides further detail on my projects and experience. I am confident that my technical depth and execution-oriented approach would be a significant asset to TSO-DATA. I welcome the opportunity to discuss how my skills can contribute to your team.

Warm regards,

Aditya Ghanashyam Ladawa