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Siemens Energy

Braunschweig, Germany

Application for Generative AI Specialist Position

I am writing to express my strong interest in the Generative AI Specialist position at Siemens Energy. My work philosophy centers on system ownership, automation, and scalable execution, treating code as an asset and inefficiency as a structural failure. My expertise in building robust, production-grade AI agents and backend systems aligns directly with your requirements for developing innovative, foundation model-powered applications.

- Agentic System Design & Orchestration: I specialize in architecting self-replacing agentic systems using LangGraph, LangChain, and LangSmith, focusing on deterministic multi-agent workflows with explicit state control and memory orchestration. My projects include a standalone agent for biomedical literature and fully automated content pipelines for Instagram and YouTube, demonstrating significant reductions in production time and cost.

- RAG, Data Engineering & Scalable Backends: My experience encompasses building and maintaining RAG pipelines with vector stores like Qdrant and FAISS. I am proficient in handling both structured and unstructured data, integrating them into scalable FastAPI backends with Postgres, Redis, and MongoDB. My principles enforce modularity, testability, and production readiness, ensuring robust deployments.

- Model Adaptation & System Validation: I develop models using TensorFlow and PyTorch, integrating them into end-to-end pipelines. My work includes advanced computer vision for medical scan data, utilizing techniques like CycleGAN and Real-ESRGAN for enhancement. I prioritize system durability and measurable output, aligning with evaluation frameworks like LangSmith, and have contributed to published research.

- Autonomous Infrastructure & Throughput Optimization: My cognition is optimized for throughput, coding 15+ hours daily to maintain deep fluency in agentic architecture and infrastructure logic. I prioritize autonomous infrastructure, long-term leverage, and absolute control over execution environments. While not explicitly familiar with Model Context Protocol (MCP), my focus on explicit state control provides a strong foundation for rapid adoption.

Siemens Energy's commitment to developing future energy systems resonates with my drive to build systems that scale and generate recurring value without oversight. I am confident my technical depth and execution-oriented approach would significantly contribute to your team's objectives. I look forward to discussing how my capabilities can support your mission.

Warm regards,

Aditya Ghanashyam Ladawa