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## AI Engineer

AI Engineer and builder specializing in designing, developing, and deploying production-ready AI agents, with 5+ years shipping GenAI solutions from rapid prototyping to production deployment. Builder-first mindset with proven track record delivering agent-based systems that improved business efficiency by 50-80% within 3 months, establishing evaluation frameworks, model governance, and scalable AI infrastructure on AWS/Azure.

## **SKILLS**

- Programming: Python, C++, JavaScript, TypeScript, SQL, FastAPI, Flask, React, NumPy, Pandas
- AI Agent Development: Agentic AI, LangChain, LangGraph, Multi-Agent Systems, Agent-to-Agent (A2A), AI Orchestration, GenAI, RAG, Prompt Engineering, Model Evaluation, Model Selection, Model Context Protocol (MCP), Human-in-the-Loop
- AI/ML Frameworks: PyTorch, TensorFlow, Scikit-learn, MLOps, Context Engineering, Model Deployment, Responsible AI, Feature Engineering
- Cloud & Infrastructure: AWS, Azure, Docker, Kubernetes, CI/CD Pipelines, API Design, DevOps, Monitoring, Performance Tuning, Scalability, Observability
- Data & Databases: Vector Databases (FAISS, Pinecone), Data Pipelines, Data Processing, Data Integration, Knowledge Graph, Analytics

#### WORK EXPERIENCE

## Grid CoOperator (Seattle, WA)

AI Engineer, Mar 2025 - Present

- Built and shipped production AI agent system from prototype to deployment, designing multi-agent architecture automating complex analyst workflows with 70% manual effort reduction within 2 months
- Designed and deployed AI orchestration infrastructure using LangChain on AWS with cost monitoring and observability, built comprehensive evaluation datasets measuring agent performance and cost efficiency across 50-100 daily queries
- Shipped iterative improvements optimizing agent performance and cost, built monitoring dashboards tracking business outcomes, established AI governance practices including bias detection and safety guardrails

## Freefly Systems (Woodinville, WA)

Senior Software Engineer, Nov 2021 - Oct 2025

- Built and deployed GenAI-powered agent for automated log analysis from concept to production, integrating foundation model APIs (Ollama, Llama 3.2) reducing manual workflows by 80% within 3 months while serving 200+ daily queries
- Designed agent workflows with cross-functional teams, implementing evaluation frameworks measuring effectiveness and establishing model governance practices ensuring responsible AI deployment
- $\bullet$  Enhanced distributed systems with microservices architecture and CI/CD pipelines, building automated testing frameworks improving deployment efficiency by 60% over 6 months

# Lumenier (Sarasota, FL)

Software Engineer - Embedded Systems, Jul 2020 - Oct 2021

- $\bullet$  Built custom software using C++ and optimized data structures delivering autonomous capabilities within 8 weeks through algorithm optimization and efficient data processing pipelines
- $\bullet$  Shipped 45% operational efficiency gains across environments while establishing testing frameworks to ensure solution accuracy and reliability

### York Exponential (York, PA)

Software Engineer - R&D, Aug 2018 - May 2020

- $\bullet$  Built Human Machine Interface using Python and ROS2 reducing operator programming complexity by 50% within 4 months through AI/ML integration and workflow automation
- Developed autonomous robot prototype integrating computer vision and machine learning pipelines from requirements to production deployment with end-to-end ownership

# **EDUCATION**

#### Washington State University (Pullman, WA)

Master of Science in Computer Science, Jan 2015 - Jan 2017

## GITAM University (Visakhapatnam, India)

Bachelor of Technology in Information Technology, Jan 2011 - Jan 2015

### **PROJECTS**

# GridCOP: Enterprise AI Agent Platform (Grid CoOperator)

- Built A2A multi-agent system using LangChain orchestration where specialized agents coordinate analytics tasks
- Implemented RAG with vector search (FAISS), integrated multiple foundation models (Claude, GPT-4), built evaluation framework measuring quality and cost metrics
- Deployed on AWS with auto-scaling and observability, implemented AI safety practices including human-in-the-loop evaluation, bias detection, and rigorous testing

# Production AI Agent for Log Analysis (Freefly Systems)

- Built full-stack GenAI agent integrating foundation model APIs (Ollama, Llama 3.2) for real-time log processing
- Led agent design including model selection, prompt engineering, and evaluation framework
- Deployed to production with comprehensive monitoring and cost tracking, established governance practices including testing, monitoring, and safety guardrails

# AI Travel Planner Agent (Personal)

- Built AI agent using Claude 3.5 Sonnet API, LangChain orchestration, and DuckDuckGo Search API
- Demonstrated rapid prototyping and agent development from concept to working solution showcasing model selection, prompt engineering, and iterative improvement