

Jeremy Cleland

Essexville, MI 48732 | (850) 502-6273 | jeremy@clelandco.com
linkedin.com/in/jeremy-cleland | github.com/jeremy-cleland | jeremycleland.com

Summary

Agentic AI engineer with startup experience building production-ready applications for healthcare and operational workflows. Develops agentic applications with AI agents, MCP, tool orchestration, APIs, external data sources, memory, and evaluation. Former Medical Innovation Officer at VetClaims.ai, combining hands-on software engineering with product collaboration and rapid delivery. M.S. in Artificial Intelligence (2025); retired Special Forces Medical Sergeant and U.S. citizen based in Michigan.

Skills

AI Application Engineering: AI agents and agentic workflows, MCP and tool orchestration, API and tool integrations, Session memory, Retrieval-augmented generation (RAG), Prompt engineering and evaluation, OpenAI and AWS Bedrock

Systems and Delivery: Python, SQL, FastAPI, Docker, MLflow, PyTorch, Data pipelines, Model deployment and versioning, CI/CD, Code review

Experience

Medical Innovation Officer (Agentic AI Engineering) | VetClaims.ai | August 2025 - May 15, 2026

- Built and iterated agentic architectures featuring tool-calling loops, multi-agent collaboration patterns, session memory management, and external tool/MCP-style integrations that replaced manual handoffs with reliable AI-enabled workflows.
- Applied rigorous prompt engineering and evaluation practices for controllability, reliability, and task performance; maintained clean, reusable code with code review discipline across short-cycle delivery.
- Bridged hands-on agentic engineering with product collaboration, repeatedly delivering mission-critical outcomes in 2-4 week cycles while priorities shifted.

AI Engineer & Graduate Research Assistant | University of Michigan - Dearborn | 2024 - 2025

- Designed and deployed end-to-end ML and agent-augmented pipelines (sepsis detection, NLP classification, RL-based optimization) achieving 90%+ accuracy; orchestrated retraining, versioning, and FastAPI deployment with MLflow and Docker.
- Developed production-ready models (CBAM-ResNet18 at 97.46% accuracy; image-to-LaTeX CNN-LSTM) with quantization and ONNX for sub-50ms edge inference, emphasizing reliability and cost-efficient deployment.

Special Forces Medical Sergeant (18D) | U.S. Army, 7th Special Forces Group (Airborne) | 2014 - 2022

- Led joint teams across five combat deployments under extreme time pressure and shifting priorities - directly transferable to rapid, parallel prototype cycles and ownership from concept through delivery.
- Conducted intelligence analysis and geospatial risk assessments for U.S. Embassy personnel in Colombia, Ecuador, and Peru.

Projects

- **Agentic Claims & Benefits Workflows** - Built production AI systems that orchestrate data retrieval, eligibility reasoning, and document generation, reducing manual effort through structured agent loops and external tool calls.
- **Multi-Agent OSINT / Threat-Intelligence System** - Designed agentic monitoring workflows with tool integration and anomaly detection (98% accuracy, 113+ locations); incorporated memory and retrieval patterns for continuous situational awareness.
- **NLP Ticket Triage & Classification Agents** - Fine-tuned RoBERTa systems with tool-augmented pipelines that cut manual workload 60%; emphasized evaluation harnesses and reliability metrics.

Education

M.S., Artificial Intelligence (Machine Learning) - University of Michigan - Dearborn, 2025

Relevant coursework: Reinforcement Learning, Advanced ML, Data Analysis, Geographic Information Systems

B.S., Liberal Arts - Excelsior University, 2022 | Summa Cum Laude , 4.0 GPA

Certificate - Advanced Software Development (Full-Stack JS) - Code Fellows, 2022

Certifications

- Prior TS/SCI - eligible for reinstatement upon sponsorship
- Army Commendation Medal with Valor (ARCOM w/ "V" device)
- PCEP - Certified Entry-Level Python Programmer
- AWS Certified Machine Learning - Specialty - in progress
- United States citizen | Fully remote-ready | Available immediately