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Summary

Aspiring AI engineer with strong academic background in computer science, machine learning, and prompt engineering. Skilled in solving business problems with AI, communicating ideas to non-technical audiences, and building high-performing, accessible AI solutions. Designed Conversational AI and automation systems serving 1,000+ queries/day (>95% user satisfaction), and high-speed, multi-agent market research platforms. Notable for real-time American Sign Language detection achieving 92% accuracy. Seeking full-time AI or ML roles.

Technical Skills

ML/AI: Prompt Engineering, Conversational AI, Multi-Modal Systems, LLMs, NLP/NLU, RAG, Model Evaluation, Deep Learning, Computer Vision, Neural Networks, Chain-of-Thought, Multi-Agent Orchestration
Programming: Python, SQL, C++
Frameworks: PyTorch, TensorFlow, Keras, Hugging Face Transformers, LangChain, LangGraph, FastAPI, Streamlit, OpenCV, FAISS
Cloud/DevOps: Docker, AWS (SageMaker, Lambda), Git, CI/CD
Other: n8n, Gemini 2.5 Pro, OpenRouter, GrokFast

Professional Experience

Graduate Research Assistant, George Mason University – Virginia, USA   Aug 2025 – Present
- Research: Emotional learning mechanisms in LLMs.
- Tech: Python, PyTorch, TensorFlow/Keras, Hugging Face, LangChain, LangGraph, FAISS, OpenAI API, RAG, FastAPI, Streamlit, Docker, SQL, AWS.

Computer Vision & Multi-Modal Prompt Engineer, Self-employed – Remote   Apr 2025 – Present
- Developed accessibility tech: real-time ASL detection using Python, TensorFlow, OpenCV, and CNNs (92% accuracy).
- Created multi-modal prompts integrating image processing and NLP for gesture-to-text translation.
- Engineered end-to-end data pipelines, neural network optimization, scalable APIs (Docker, AWS).

Conversational AI Engineer & RAG Systems Specialist, Self-employed – Remote   Jan 2025 – Mar 2025
- Built chatbot handling 1,000+ queries/day at 95% satisfaction.
- Developed prompt routing (web search, RAG, tools) and context tracking.
- Implemented session, faithfulness, and evaluation frameworks.

Intelligent Automation & Prompt Engineering Specialist, Self-employed –   Nov 2024 – Jan 2025
Remote
- Built incident triage system with LangGraph: 200+ incidents/week, 78% automation.
- Prompt engineering for workflow, decision-making, technical documentation extraction.
- Confidence-based routing, retry logic, and incident escalation with human-in-loop.

LLM Operations & Prompt Optimization Lead, Self-employed – Remote   Aug 2024 – Nov 2024
- Built AI-powered market research platform (CrewAI + GPT-4), generating 3,700-word reports in 5 seconds.
- Achieved 98% accuracy in financial modeling, 45% API cost reduction via tailored prompts.
- Engineered agent prompts for market sizing, TAM/SAM/SOM, industry adaptation.

Senior AI Research Engineer & Prompt Architect, Freelance – Remote   Jan 2023 – Apr 2024
- Developed and published 5 research papers with prompt chaining, multi-agent strategies (40% improvement in accuracy).
- Novel stress detection from social media, technical documentation prompts, few-shot and chain-of-thought strategies.

Education

George Mason University, Master's in Computer Science – Fairfax, VA	2024 – 2026
KL University, Bachelor of Technology – Computer & Information Sciences, India	2020 – 2024

Key Projects

American Sign Language Detection (ASL) System — 2025–Present
- Real-time ASL gesture recognition system (Python, TensorFlow, OpenCV, CNN), 92% accuracy.
- Integrated multi-modal prompt engineering: gesture to text with adaptive pipelines and NLP.
- Deployed as scalable API on AWS with Docker; optimized data flows for accessibility.

Production-Level Conversational AI & RAG Platform — 2025
- Production chatbot using prompt routing (web search, RAG, math tools) and context memory.
- 1,000 queries/day at over 95% user satisfaction, implementing faithfulness evaluation.
- FAISS-integrated domain-specific retrieval, prompt evaluation framework.

Incident Triage Automation System — 2024-2025
- Built with LangGraph, 200+ incidents/week (78% automation) using advanced decision prompts.
- Confidence-based routing, retry logic, escalation, and technical documentation extraction.

AI Market Research Platform (CrewAI & GPT-4) — 2024
- Multi-agent system for company/market analysis, 3,700-word report in under 5 seconds.
- Agent prompts for TAM/SAM/SOM, strategy, and competitive intelligence.

Research Platform and Publication Suite — 2023–2024
- Prompt architectures for 5 peer-reviewed papers (ML, stress detection, CatBoost vs NN, AI in cybersecurity, blockchain, speech processing).
- Multi-agent systems for social media mining and few-shot technical documentation.

Publications & Recognition

- **Publications:**
  - Comparative Analysis of Psychological Stress Detection: A Study of Artificial Neural Networks and CatBoost Algorithm
  - Enhancing Hairfall Prediction: A Comparative Analysis of Individual Algorithms and An Ensemble Method
  - Assessing the Effectiveness of Artificial Intelligence Techniques in Mitigating Cybersecurity Risks
  - A Novel Strategy for Streamlining Land Registration using Ethereum Blockchain
  - Speech Quality Assessment and Control in Indian Languages

- **Honors-Awards:** Research Excellence Award, Best Accessibility Innovation Award
- **Open Source:** Contributor to PyTorch, Hugging Face