

Resume Tailoring Guide & Content Draft

This document provides the exact text blocks you need to update your resume for the Anthropic Fellows application. The goal is to bring your military software engineering, hardware simulation, and embedded systems experience to the forefront, as these are your most powerful differentiators for the ML Systems & Performance workstream.

1. Professional Summary (Header Section)

Replace your current summary with this version that bridges your hardware/software background to AI systems.

Systems & Software Engineer | Technical Program Manager Versatile engineering leader with a unique foundation spanning low-level military embedded systems, modern Python/ML pipelines, and global enterprise infrastructure. Proven ability to bridge the hardware-software boundary, from bit-level array processor coding and hardware simulation to edge AI deployments on constrained hardware. Combining deep technical rigor with decades of experience managing \$10M+ technology transformations to build reliable, performant, and secure systems at scale.

2. Technical Skills Section

Place this immediately below the summary.

- **Languages & Frameworks:** Python, TypeScript, C, C++, Ada, Pascal, Fortran, OpenCV, OpenVINO, TensorFlow, PyTorch
- **Hardware & Embedded:** Arduino, Raspberry Pi, NVIDIA Jetson Nano, STM32 Microcontrollers, TI/Intel/Motorola Microprocessors, TI DSPs
- **Systems Engineering:** Hardware Simulation & Peripheral Emulation, Logic Analyzer & Oscilloscope Debugging, Sensor Integration, Edge AI Pipelines

- **Program Management:** Agile/Scrum, ITIL, Risk Mitigation, Cloud Architectures (PaaS, IaaS), Global Infrastructure Deployment
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3. New Section: Embedded Systems & Edge AI (Current/Ongoing)

Place this before your professional experience section to show that your hardware skills are active.

Embedded Systems & Edge AI Engineering (Independent & Academic Projects) | *Ongoing*

- **Edge AI Computer Vision Pipelines:** Developed and deployed empirical CV pipelines using Intel OpenVINO on constrained hardware (NVIDIA Jetson Nano), performing real-time inference with robustness testing across varied lighting and motion conditions.
 - **SBC & Microcontroller Integration:** Actively build and integrate sensor networks and peripheral hardware across Arduino, Raspberry Pi, NVIDIA Jetson Nano, and STM32-based microcontrollers, bridging physical sensors with computational pipelines.
 - **LLM & Model Behavior Tooling:** Developed Python and TypeScript utilities for LLM output validation (JSON Fixer) and browser-based speech recognition/keyword detection to evaluate model behavior triggers.
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4. Re-ordered Professional Experience Section

Your experience should flow in this order. The Military Software Engineering section is the most critical addition.

Microsoft | Senior Business Program Manager, Marketing Operations | 2021 – Present

(Keep your current bullet points here, but keep them concise to save space for the technical sections.)

HCL Technologies (PepsiCo) | Senior Project Manager, Global PMO | 2018 – 2021

This role must be highlighted as it contains your applied ML experience.

- **ML/AI Anomaly Detection (IOCC Pilot):** Led global technical team utilizing machine learning and predictive analytics to detect anomalies across global corporate IT infrastructure, significantly reducing MTTR.
- **Global Infrastructure Modernization:** Directed portfolio of large-scale technology transformations including storage (SAN/NAS), database migrations, and physical/virtual server infrastructure refreshes.

Texas Instruments / Department of Defense | Software Engineer | (Insert Years)

This is the critical new section. It replaces the “Early Career” one-liner.

- **Low-Level Embedded Programming:** Developed mission-critical, secure software for classified military programs using C, C++, Ada, Pascal, and Fortran.
- **Processor & DSP Optimization:** Programmed directly for TI, Intel, and Motorola microprocessors, including TI DSPs and bit-level coding for array processors utilized in advanced image processing systems.
- **Hardware Simulation & Emulation:** Collaborated with internal teams to build software simulations of hardware systems under active design; developed faithful models of peripheral hardware behavior to enable early software integration and testing before physical platforms existed.
- **Hardware-Software Integration & Debugging:** Conducted extensive field testing and integration of deployed military systems, utilizing logic analyzers and oscilloscopes to trace signal behavior, identify timing violations, and debug complex hardware-software failures at the physical layer.

Sabre | Principal Project Manager, End User Computing | 2015 – 2017

(Keep current bullet points, but condense if needed.)

Composite Technology Inc. (Sikorsky) | Military & Commercial Program Manager / Ethics & Compliance Officer | 2012 – 2015

(Keep current bullet points. The Ethics & Compliance role is good for the AI Security secondary workstream.)

5. Education & Certifications

Ensure your AI education is grouped together and highly visible.

AI & Technical Education

- Intel Edge AI Nanodegree (Focus: OpenVINO, Jetson Nano, Computer Vision)
- Bertelsmann Tech Scholarship Challenge - AI Track Nanodegree
- Nutanix Hybrid Cloud Scholars Program

Academic Degrees

- Master of Business Administration (MBA) – University of Texas at Austin
- Bachelor of Science, Systems Science – University of West Florida

Certifications

- Professional Scrum Master (PSM I)
- Project Management Professional (PMP)
- ITIL 4 Foundation
- Microsoft AI-900 (Azure AI Fundamentals)
- GitHub GH-300