

John M. Cook

Computer Engineer | U.S. Army DEVCOM GVSC
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PROFESSIONAL SUMMARY

Military veteran and computer engineer with 13+ years of software engineering experience across U.S. Department of War organizations and academia. Currently leads the software innovation and integration team for the Government Owned Ground Vehicle Operating System (GVOS) at Army DEVCOM GVSC. Expertise includes embedded Linux (Yocto), C/C++/Python on resource-constrained platforms, containerization, reverse engineering, and secure evaluation of AI/LLM tools under classification constraints. Prior service as MQ-1 Predator and MQ-9 Reaper sensor operator and instructor. Maintains continuous customer relationships across the U.S. Intelligence Community, including the National Security Agency and Central Intelligence Agency.

SKILLS & CERTIFICATIONS

Languages: C, C++, Qt, Python, SIMULINK, JavaScript, Ada, Assembly

Platforms & Tools: Embedded Linux (Yocto/BitBake), Docker, Kubernetes, Rancher, VxWorks, MagicDraw, IBM DOORS, Git, IDA Pro, Ghidra, GDB

Standards: MIL-STD-1553, MIL-STD-6017, DO-178C, OSI Model, Network Protocols (HTTP, DNS, SNMP), Container Security (NSA/CISA hardening)

Clearance: Secret (currently active) | **Certifications:** CCNA Cyber Ops

PROFESSIONAL EXPERIENCE

U.S. Army DEVCOM Ground Vehicle Systems Center (GVSC)

Computer Engineer, Software Innovation Team | January 2026 – Present | Warren, MI

Leads software innovation and integration for the Government Owned Ground Vehicle Operating System (GVOS), performing code refinement, error correction, and documentation generation under classification constraints. Evaluates native software capabilities and embedded Linux environments using the Yocto Project and conducts hardware-software analysis for ground vehicle platforms. Assesses advanced AI and large language model tools for local versus remote deployment while enforcing data security, classification, and compliance standards. Collaborates with ISSO, SRE, and cross-functional teams on logging practices, repository management, and secure development workflows.

U.S. Army Futures Command / DEVCOM GVSC

Computer Engineer | Joint Lightweight Tactical Vehicle (JLTV) Program | 2024 – 2025 | Warren, MI

Served as Software Lead for the Joint Lightweight Tactical Vehicle program, directing verification, validation, and integration activities across software baselines. Coordinated with government stakeholders, contractors, and cross-functional engineering teams to ensure software readiness and compliance with program requirements.

U.S. Army Futures Command / DEVCOM GVSC

Computer Engineer | M160 and OSVTSU Programs | 2024 – 2025 | Warren, MI

Led technical project execution for the M160 and OSVTSU programs. Coordinated requirements definition, design reviews, risk management, and delivery milestones with government and contractor stakeholders. Provided technical leadership and guidance to engineering teams supporting ground vehicle systems modernization.

DCS Corp

Senior Software Engineer | Supporting U.S. Army Combat Capabilities Development Command | Prior to 2024

Provided senior software engineering support to U.S. Army Combat Capabilities Development Command programs. Contributed to software development, integration, and technical analysis activities in support of Army modernization objectives.

TigerByte Cyber / WebSensing

Senior Engineer | 2022 | Participation in DARPA Cyber Truck Challenge

Participated in the 2022 DARPA Cyber Truck Challenge as part of the TigerByte Cyber / WebSensing team. Applied reverse engineering, embedded systems analysis, and cybersecurity techniques in a competitive research environment focused on vehicle cyber-physical systems.

Falkonry

Senior Engineer | Prior role

Supported software and data analysis efforts related to operational machine learning and industrial systems monitoring.

University of Iowa – Internet Research Lab

Graduate Research Assistant / Teaching Assistant | August 2018 – May 2021 | Iowa City, IA

Conducted graduate research in the Internet Research Lab and co-authored a peer-reviewed paper presented at the Privacy Enhancing Technologies Symposium (PETS) 2020 titled “Inferring Tracker-Advertiser Relationships in the Online Advertising Ecosystem.” Served

as Teaching Assistant for CS3640 (Introduction to Networks) and Introduction to Java Programming, and later as primary instructor for the Network Security and Privacy course serving more than forty students. Collaborated with faculty and international graduate researchers, including Pakistani colleagues, while expanding professional networks through advisor-supported travel to institutions such as Harvard University.

Rockwell Collins (Collins Aerospace)

Senior Software Engineer | August 2014 – August 2018 | Cedar Rapids, IA

Developed software-defined radio modules for U.S. Department of War programs using C, C++, JavaScript, and Python within an agile team environment. Implemented network protocol stacks including HTTP, DNS, and SNMP, and applied MIL-STD-6017 variable message formats to support interoperable tactical communications.

Honeywell Aerospace

Senior Software Engineer | November 2013 – August 2014 | Aguadilla, PR

Designed and implemented built-in-test software for an advanced graphics processing module on the U.S. Air Force F-15, communicating over MIL-STD-1553 buses. Developed safety-critical software under DO-178C guidelines using C, C++, Ada, and Python on the VxWorks real-time operating system with requirements managed in IBM DOORS.

Northrop Grumman / Xetron

Software Engineer | February 2013 – October 2013 | Cincinnati, OH

Developed embedded software for resource-constrained systems using C, C++, Python, and assembly language while applying OSI-model networking and memory architecture principles. Applied reverse-engineering tools including IDA Pro, Ghidra, GDB, hexdump, and nmap to analyze and validate software behavior in constrained environments.

NJVC

Unix Systems Administrator | Supporting Office of Naval Intelligence | August 2008 – May 2009 | Suitland, MD

Administered imagery intelligence systems in support of the Office of Naval Intelligence. Developed and maintained network transfer applications using C and shell scripting. Supported system reliability and data movement requirements for intelligence production workflows.

BAE Systems

Imagery Analyst | Supporting Defense Intelligence Agency | January 2008 – August 2008 | Washington, DC

Produced imagery-derived intelligence products in support of national-level customers at the Defense Intelligence Agency. Conducted analysis and reporting in support of ongoing intelligence requirements.

U.S. Air Force

Imagery Analyst and UAV Sensor Operator | September 2002 – December 2007 | Nellis AFB, NV

Operated MQ-1 Predator and MQ-9 Reaper sensor payloads in support of remote combat and intelligence missions. Performed real-time targeting, laser designation, and battle damage assessment. Instructed incoming sensor-operator students and established customer relationships across the U.S. Intelligence Community, including the National Security Agency and Central Intelligence Agency. Separated honorably at the rank of Staff Sergeant (E-5).

EDUCATION

Master of Computer Science — University of Iowa, Iowa City, IA (2018–2021)

Bachelor of Science, Computer Science (ABET) — George Mason University, Fairfax, VA (2009–2012)

ADDITIONAL LEADERSHIP

Instructed more than thirty military personnel at a USAF Formal Training Unit during surge operations. Served as primary instructor for the University of Iowa Network Security and Privacy course (40+ students). Maintains continuous customer relationships with all eighteen U.S. Intelligence Community agencies stemming from Imagery Analyst and UAV sensor operator service.