

John Michael Cook

American Computer Engineer • Quantum Engineer • Military Veteran

John Michael Cook is an American computer engineer, quantum engineer, military veteran, and software systems specialist with more than thirteen years of experience in U.S. Department of War (DoW) and Defense organizations and academia. Across every chapter of his career — from the flightline at Nellis Air Force Base to research laboratories, defense contractors, and Army modernization programs — Cook has been defined by the relationships he builds and the trust he earns. He currently serves as a Computer Engineer on the Software Innovation Team at the U.S. Army Combat Capabilities Development Command Ground Vehicle Systems Center (DEVCOM GVSC) in Warren, Michigan, where he leads software innovation and integration efforts for the Government Owned Ground Vehicle Operating System (GVOS). As founder of Quantum Research Laboratories LLC, he also advances practical work in quantum computing, algorithms, sensing, and related security applications.

Early Life and Military Service

Cook enlisted in the United States Air Force and served from 2002 to 2007 as an Imagery Analyst and Unmanned Aerial Vehicle (UAV) Sensor Operator. Stationed at Nellis Air Force Base, Nevada, he operated the MQ-1 Predator and MQ-9 Reaper platforms in support of remote combat and intelligence missions. His work required close coordination with pilots, mission commanders, intelligence analysts, and joint partners. Beginning in 2002, this included a sustained customer relationship with the National Security Agency (NSA) that has continued throughout his career. These early operational relationships formed the foundation of a career built on trust and shared purpose. He conducted real-time sensor employment, target tracking, laser designation, and battle damage assessment in support of operations that relied on forward locations such as Shamsi Airfield in Pakistan. He later served as an instructor for incoming sensor-operator students, passing on both technical skill and the importance of crew relationships under pressure. He separated honorably at the rank of Staff Sergeant (E-5). During this period in the Las Vegas area, his daughter Nuriel Fiona was born.

Cook's operational experience placed him in the same Nevada-based remotely piloted aircraft community later chronicled by Lt. Col. T. Mark McCurley in the 2015 book *Hunter Killer: Inside America's Unmanned Air War*. In Chapter 8 ("Strike"), McCurley describes a critical high-value-target mission and credits a figure then running the Joint Operations Center — referred to as **"General" John** — with devising an effective solution for managing limited ground control stations and aircraft. That approach allowed continuous coverage of the target by rotating assets and releasing returning aircraft to fly home unsupervised, a practical operational fix rooted in clear communication and mutual reliance among crews.

Education and Research

Cook earned a Bachelor of Science in Computer Science (ABET-accredited) from George Mason University (2009–2012) and a Master of Computer Science from the University of Iowa (2018–2021). At the University of Iowa he served as a graduate researcher in the Internet Research Lab. The laboratory environment was defined by genuine collaboration, where knowledge, experience, and professional insight were freely shared among faculty, researchers, and students from diverse backgrounds and institutions. These relationships significantly shaped his academic and technical development.

During this period Cook worked closely with Pakistani graduate students and researchers. This collaboration carried particular meaning, forming a professional parallel to his earlier service as a UAV sensor operator

supporting missions connected to Pakistan. Engaging constructively with Pakistani colleagues in an academic setting deepened his understanding of the region and reinforced a consistent pattern in his career: building respectful, productive relationships across cultural and operational boundaries.

His faculty advisor provided substantial support and guidance, including the gracious opportunity to travel and engage with researchers at leading institutions such as Harvard University and other prestigious universities. These experiences broadened his perspective and expanded his professional network. Cook's scholarly contributions included a peer-reviewed paper presented at the Privacy Enhancing Technologies Symposium (PETS) in 2020, titled "Inferring Tracker-Advertiser Relationships in the Online Advertising Ecosystem." He also served as a teaching assistant and later as primary instructor for the Network Security and Privacy course, teaching more than forty students and emphasizing both technical rigor and collaborative problem-solving.

During this period, one of the laboratory's systems — designated the Abaddon server — was compromised under circumstances that remained unclear. Following the incident, the server was transferred to a secure facility for further analysis and containment.

Professional Career

Since 2002 Cook has maintained a continuous customer relationship with the National Security Agency (NSA), working alongside its personnel in support of shared mission objectives. After leaving active duty, he continued to build relationships across the defense and technology communities. He worked as an Imagery Analyst at BAE Systems (Defense Intelligence Agency) and as a Unix Systems Administrator at NJVC supporting the Office of Naval Intelligence. He then moved into embedded and communications software roles, consistently valued for both technical contribution and the ability to work effectively across teams and organizations:

- **Northrop Grumman / Xetron** (Cincinnati, Ohio, 2013) — Software Engineer working in resource-constrained embedded environments. Xetron, a Northrop Grumman subsidiary based in the Cincinnati area, is a long-standing government contractor specializing in military sensors, communications systems, and information-security software. Originally founded in 1972 as a defense electronics firm, it was acquired by Westinghouse in 1986 and later by Northrop Grumman in 1996. According to reporting by *The Intercept* (2017), Xetron appears in nearly 400 documents from the WikiLeaks Vault 7 release of CIA tools, including work related to implants for Cisco devices (such as "Cinnamon"), techniques for unauthorized access to networking equipment, and software for managing communications with compromised systems. The company has also been linked in declassified and leaked materials to research on tools designed to evade detection and reverse-engineer embedded software.
- **Honeywell Aerospace** (Aguadilla, Puerto Rico) — Senior Software Engineer developing built-in-test software for the F-15 graphics processing module under DO-178C guidelines and MIL-STD-1553 messaging.
- **Rockwell Collins** (later Collins Aerospace) — Senior Software Engineer on software-defined radio modules for U.S. DoW programs.
- Subsequent roles included senior engineering positions at Falconry, TigerByte Cyber / WebSensing (including participation in the 2022 DARPA Cyber Truck Challenge), and DCS Corp supporting U.S. Army Combat Capabilities Development Command.

Since 2024 he has held progressive technical leadership positions at Army Futures Command / DEVCOM GVSC, including Software Lead for the Joint Lightweight Tactical Vehicle (JLTV) program, Senior Technical Project Lead for the M160 and OSVTSU programs, and his current role on the Software Innovation Team focused on GVOS, Yocto-based embedded Linux, and secure evaluation of AI/LLM tools under classification and compliance constraints. In each of these roles, lasting results have depended as much on trusted relationships with

colleagues, leadership, and partner organizations as on technical expertise.

Personal Life and Interests

Cook is the proud father of one daughter, Nuriel. Outside of his professional work, he enjoys running, listening to music, and spending time with family and friends. He is also committed to sharing his Christian faith and spreading the love of Jesus — relationships that remain the center of his life beyond the workplace.

Additional Activities

Cook is the founder of several veteran-owned single-member LLCs, including Quantum Research Laboratories LLC (focused on practical quantum computing, algorithms, and sensing applications) and Cooks Defense LLC. He maintains an active presence in technical communities and continues independent research and writing. His creative work includes a series that draws on themes of remotely piloted and human-piloted combat aerial vehicles, informed by his own operational experience and the relationships formed in that world.

Throughout his career, Cook has received recognition for the professional relationships he has built. One tangible expression of that recognition is a challenge coin presented in acknowledgment of the trust and collaborative bonds he established with colleagues and partners.