

Alex Hostick

ahostick86@gmail.com | Clearance: Top Secret / SCI Eligible

Skills

Software: LabVIEW/LabVIEW FPGA, Python, SQL/PostgreSQL, MATLAB, Machine Learning, PyTorch/Tensorflow, Java/Node.js/REST, Docker/YAML, C/C++, Cloud Compute Systems Engineering/Analysis

Hardware: Software Defined Radios, Vector Network Analyzers, Oscilloscopes, Antenna Design, Single Board and Bare Metal Computers, Power Network Analyzers, GPS Wavefront/Simulation

Tools/Other: AutoCAD, Visual Basic, Control Systems, DSP

Professional Summary

Senior RF/Embedded Systems Engineer with 19 years of experience leading SATNAV, Electronic Warfare, and mission-critical DoD projects. Proven record in GPS test satellite systems, hardware/software integration, and cross-functional team leadership. Active TS/SCI clearance eligible with strong expertise in RF, embedded systems, and navigation technologies.

Professional Experience

SATNAV Lead Engineer, AFRL Space Vehicles Directorate

ARES Corporation, Albuquerque, NM

11/2018 – Present

- Supervised engineering team of 5, overseeing tasking, reporting progress, and training junior staff
- Led payload validation and mission broad agency announcement hardware for **Navigation Technology Satellite-3**, the first GPS test satellite since 1977
- Developed tools/interfaces reducing R&D DUT and SBIR deliverable validation timelines by 50%
- Authored test plans, design documents, and system verification procedures adopted by AFRL Space System Directorate and SATNAV programs
- Created custom SDR-based signal testing strategies for pre-deployment validation
- Generated HIL/SIL testing strategies covering 80% of DoD SATNAV R&D systems for NTS-3 mission

Electronic Warfare Engineer, Joint Navigation Warfare Center

PreTalen, Albuquerque, NM

02/2017 – 11/2018

- Supported DoD mission for PNT superiority with inter-agency and coalition collaboration.
- Designed modular testbeds enabling rapid reconfiguration of EW payloads for cross-domain experimentation
- Advanced GPS NAVWAR equipment, EA systems, and NAVWAR domain knowledge
- Designed embedded systems for NAVWAR testing, increasing testing capacity by 30%
- Drafted technical reports influencing acquisition decisions for next-generation NAVWAR capabilities

Electrical and Controls Engineer

CEI Enterprises, Inc, Albuquerque, NM

01/2015 – 02/2017

- Designed/programmed PLC-driven control panels, improving efficiency by 20%
- Migrated to SIEMENS devices, reducing control equipment costs by 80%
- Supervised 15 electricians, reducing errors by 25% and improving delivery times

Electrical Systems Integration Engineering

Dell Engineering Services, Peoria, IL

05/2011-01/2015

- Led electrical integration for Caterpillar 785–797 mining trucks
- Developed harness routing and cable designs to optimize manufacturability and reduce assembly time
- Oversaw manufacturing/integration of engine components, cabs, CAN/Profibus, and electric drives
- Reduced schematic creation time for Caterpillar China by 60% via CREO scripting API automation

Education

Master of Science, Computer Engineering, Internet of Things Concentration

University of New Mexico, Albuquerque, NM | 12/2024

Bachelor of Science, Electrical Engineering Technology

Southern Illinois University-Carbondale, Carbondale, IL | 05/2011