

Sample Electrical Engineer/QA

Summary of Qualifications

As an Electrical Engineer, I've been instrumental in developing QA test design protocols for testing hardware used by the U.S. military in accordance with regulatory compliance standards. Having managed a variety of projects during my tenure, I am proficient at system bring-up and design validation. In particular, I've conducted RF transport, optical link, information system and audio validations on numerous types of hardware. Furthermore, I serve as a SME on data encryption and security protocols. Bi-lingual – Mandarin/Taiwanese

Technical Skills

Certifications: VMware vSphere version 5.1, CMMI version 1.3

Programming languages: C, C++, PASCAL, Visual Basic, C#, JavaScript, HTML

Encryption systems: Simple Key Loader (SKL) AN/PYQ-10(C), Data Transfer Device (DTD) AN/CYZ-10

Software: OrCAD Capture, UNIX system/Solaris 8, MGEN Scripting, SNMP Polling, Layer-3 Packet Captures

Embedded systems: Motorola MC9S12, CSM12C32, DSP programming, PLC programming

Radar test systems: PLM-4, Baringa, Flight Line Test Sets, Advanced Multiple Environment Simulator (AMES) system/alpha

Harris Radio system (AN/PRC-117G), Harris SideFalcon (AN/PRC-152A)

EPLRS Radio system (RT-1915 EPLRS MANET)

Ultra Electronics TCS Enhanced High Capacity Line of Sight (EHCLoS) radio system
ITT SideHat radio system

Vehicular intercom communications

Optical/drafting programs: AutoCAD, MicroStation, Verizon ICGS
PSPICE, MATLAB

Professional Experience

US Army

2007 - present

Computer Engineer

I have managed several projects that include the following:

Event Design and Analysis (ED&A)

- Manage computer lab at Tactical Control Facility, coordinating test events
- Support R&D for evaluation practices, metrics and procedures
- Perform system integration testing for systems-under-evaluation to verify signal signatures and test communication links to comply with system design and electrical planning
- Perform product failure analysis
- Conducted RF (radio frequency) validation on systems operating on different waveforms to assess data flow, completion rate and other matrices

Software Engineering Directorate

- Project Lead for Counter Warning Missile System User Data Module team
- Liaise between US government and support cells to ensure successful transition of AAR-57 system

Alternate Project Lead for R&D team

- Served as Subject Matter Expert to redesign automation test equipment

Mission Data Set Programmer for Radar Warning Receivers System

- Built databases using Access, Visual Basic based on clients' design specs
- Conducted stress test detection for fixed-wing and rotary aircrafts' radar detection system sets

Innovative Engineering, Inc.

2007

Fiber Optic Engineer

- Designed fiber overlays for Verizon, AT&T and Comcast
- Analyzed data for fiber optic studies, including optical validation
- Tested fiber overlays for signal losses

Education

Naval Postgraduate School

anticipated 2017

M.S. - Systems Engineering

Pennsylvania State University

2006

B.S. - Electrical Engineering

Defense Acquisition University

SPRDE Systems Planning, Research Development & Engineering

Engineering Level 3

Program Management Level 1