

Objective

Software engineering position focused on design and implementation of large-scale software projects, backed by Agile and DevOps best practices.

Profile

Self-motivated, creative thinker with strong interpersonal skills. Welcomes constructive criticism of his work and displays a collaborative orientation.

Strong software design and development skills across multiple languages and operating systems.

Refined presenter, with experience pitching to peers as well as internal and external customers. Proven track record of success communicating to multiple levels of understanding, ranging from engineers to executives.

Specialist in DevOps technologies and processes. Focused on the use of Ansible, Packer, and Vagrant, coupled with tools like Git and Jenkins to create continuous delivery environments.

Key Achievements

Graduate of the Lockheed Martin Engineering Leadership Development Program (ELDP), class of 2014.

Evangelist for the Panopticon Geospatial Integration and Visualization Framework. Responsibilities include technical consulting, presentation, and developer outreach.

Implemented a DevOps workflow that enabled easy deployment of a command and control (C2) application, turning a 6-8 hour process into one that takes less than 45 minutes.

Member of a team developing and maintaining a C2 application written in a mixture of Java, C++, and Ada. Responsible for the design and development of multiple features, including their demonstration to key stakeholders.

Led a team of 10 contractors and 5 interns through a 5-month Unit Test remediation project spanning C, C++, and Java products. End result was a unit test base that more thoroughly and accurately represented the state of the software.

Mentor for summer internship program. Responsibilities included developing a curriculum of professional development and planning an end-of-summer presentation for local management.

Proposed (and won) a Destination Innovation project to develop a Java-based Simulation Authoring environment for use with our C2 applications. Developed a working product under budget and ahead of schedule.

Education

University of California, San Diego (2006-2010) B.S. Electrical Engineering

University of California, Los Angeles (2012-2015) M.S. Engineering (Computer Networks)

Relevant Skills

Proficient in the design and development of applications written in:

- Java (JDK 7-8)
- Python (2 and 3)
- JavaScript (including Node.js and AngularJS 1.x)
- C and C++ (including embedded programming)
- Bash shell scripting/Perl

Familiar with development using Service Oriented Architectures (SOA) including IDL, DDS, SOAP, and ReST

Proficient in workflow tools including: Ansible, Vagrant, Packer, Mercurial, Git, and Jenkins

Systems administration for Windows, Linux, and Mac OS X Systems, as well as familiarity with the VMWare ESXi/vCenter platform.

Currently holds a **US SECRET** clearance.

Brief History of Employment

Lockheed Martin (June 2009 - Present)

Selected Highlights

C2 Systems -- Software Engineer

- Member of a team tasked with modernizing a C2 product with 30+ years of fielded experience.
- Utilized webservices technology such as IDL, DDS, SOAP, and ReST to integrate complex C2 systems.
- Participated in a human-machine interface (HMI) upgrade on frontend and backend functionality.
- Developed a chat application to facilitate communication and collaboration in a C2 Operations Center.
- Introduced DevOps tooling to streamline development and deployment.

Technologies: C++, Java, Ada, Qt, Mercurial, Git, Packer, Ansible, Vagrant, IDL, DDS, SOAP, ReST

BD Operations -- Informatics Engineer

- Developed multiple data-driven visualizations to provide insight to execs on the state of the business.
- Led design of a ReSTful API to communicate with an enterprise database application.
- Utilized AngularJS (1.x) with custom templates and directives to create a responsive single-page-application (SPA) as a replacement frontend for an enterprise database application.
- Created multiple jQuery plugins to visualize data and create UI elements.

Technologies: AngularJS, jQuery, Underscore.js, ReST, SharePoint development

Rail Systems -- Lead Software Engineer

- Led teams of up to 25 people in the design and development of a safety-critical positive train control (PTC) system for deployment to an Australian freight rail customer.
- Participated in the development of trainborne software intended to provide protection and enforcement functions for a safeworking system.
- Implemented several major functions, including a safety-critical acknowledgement feature
- Led a test remediation team of 15 engineers who reviewed, modified, and augmented 17,000+ unit tests to better test the code base.
- Moderated and participated in 80+ code reviews spanning the entire codebase.

Technologies: C++ (QNX Neutrino OS), C (TI RTOS), Java, Python, JIRA/FishEye/Crucible

Panopticon -- Software Engineer and Evangelist

- Software developer for Panopticon, a GeoSpatial integration and visualization platform build on top of NASA's Java-based WorldWind SDK
- Helped maintain and document Panopticon's plugin based architecture.
- Developed plugins related to simulation authoring/playback, command and control operations, and fire control for air defense.
- Served as an evangelist and technical consultant for the platform, helping teams across the Lockheed Martin Corporation to exploit Panpticon's capabilities in a wide array of applications.

Technologies: Java, WebStart, WorldWind, Ant, ReST, SOAP, DDS