EDUCATION

Carnegie Mellon University

August 2011

Master of Science in Software Engineering, Development Management

• Simultaneously enrolled in Lockheed Martin's Leadership Development Program

University of Virginia May 2008

Bachelor of Science in Computer Science/Engineering, Cognitive Science, Minor in Engineering Business

- Senior Manager for the University IT student support staff for all labs and libraries
- Student Council Representative for the entire Engineering School

EMPLOYMENT

Mobile Developer and Consultant

Freelance (2015-Present)

Developed cross-platform Body language education companion app for New York Times Bestselling author, including mobile admin interface with live video uploading, cloud transcoding, and push notifications. Developed resource management application for athletic coaching organization to manage dozens of staff and hundreds of students.

Angular, Ionic Framework, PhoneGap/Cordova, Parse BaaS, AWS S3, Lambda, Elastic Transcoder, Firebase

Enterprise Security

Lockheed Martin NCITE (2014)

Created data visualization/manipulation interface for millions of file signatures increasing user efficiency and capabilities by orders of magnitude. Led development and UX design over several iterations and implementations, from prototype to production.

MongoDB, R, Jupyter, Python WSGI, Enyo, Flask, Bootstrap, Meteor, Express, Angular

BlackBerry Transition

Lockheed Martin, Veteran Affairs (Late 2013)

Primary author of multi-million dollar technical proposal to modernize customer infrastructure, leveraging integrations and partnerships to exceed security/functional requirements while meeting schedule/budgetary needs. Fostered relationship with VA Office of Information Security from initial demo.

Blackberry, iPhone/iPad, Android, AirWatch MDM, Good, Exchange

Document Cloud

Lockheed Martin, Federal Air Marshal Service (Early 2013)

Prototyped highly secure interface for mobile training and information distribution, projecting saving millions.

ElasticSearch, Solr, ¡Query Mobile, Backbone, VPN

MONAX (Tactical Cellular)

Lockheed Martin (2010-2012)

Lead developer in charge of architecture, development, integration, and test, to numerous mobile applications designed for a tactical cellular network. Managed software/hardware of all non-network related technical infrastructure including servers, smartphones, tablets, and prototype (portable Linux) devices. Executed more than a hundred customer engagements, ranging from conference presentations to full military technical exercises and media demos. Grew small R&D project to an award-winning flagship product.

- Drastically cut average demo expenses while increasing functionality and expanding opportunities, by first integrating and virtualizing dozens of services into a single platform and then by simulating numerous capabilities into a "DemoKit".
- Completely replaced subcontractor VOIP conferencing product (nearly \$1M investment) with more performant and stable software built on open-source solutions.
- Founding member of mobile development SME team assisting programs across the entire company. iOS (Objective-C), Android (Java), Windows Mobile, HTML5, OpenStreetMap/MapBox, VOIP, Biometrics, Reporting, IRC/XMPP, Video Streaming/Sharing, VMWare, Linux/OS X/Windows Server, PostgreSQL, MySQL, Java EE, Rails, PHP, MDM (AirWatch, Good)

GVS (Geospatial Intelligence)

Lockheed Martin (2008-2009)

Systems Delivery: Deployment, transition, and maintenance of commercial and contractor products on more than one hundred servers across seven unclassified and classified networks.

ESRI. Google Earth

Systems Analysis: Saved red program from contract termination, solving the highest-priority defect in less than a fifth of estimation.

Oracle. Java EE

Information Technology: Primary integration, delivery, and configuration SME for the planning system used by multiple defense/intelligence agencies and police/emergency services during special security events (inaugurations, athletic events, diplomatic meetings, etc.)

Process Improvement: More than quadrupled efficiency by automating and optimizing customer operations and support procedures.

Ipswitch, Nagios, Splunk, MediaWiki

IRAD (Internal Research and Development Programs)

Lockheed Martin (2006-2008)

Satellite Scheduling: Modeled imaging asset control system by integrating legacy systems with cutting edge geospatial technologies

World Wind, Google Earth

London Olympics: Staffing geospatial visualization and manipulation prototype.

Data Fusion: Investigated low-power high-value data communication schemes using learning classifier systems and wireless sensor networks.

PERSONAL AND OPEN-SOURCE

Restaurant ordering and payment system progressive web app

AWS Lambda, DynamoDB, Kinesis, React, GraphQL, Relay, React Native, HTML5 Canvas (prev. Angular/Ionic)

Machine learning recommendation engine for electronic gaming data records AWS Lambda, DynamoDB, Redis, Lua, React, Material Design

VIP Contributor to the open-source Serverless Framework

Volunteer Computer Science Tutor