# KIT PLUMMER

# CLEARED TECHNOLOGY ARCHITECT AND SOFTWARE ENGINEERING PRACTITIONER

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# **Profile**

A technology architect and engineer focused on distributed computing, open source development, software delivery operations, and emergent innovation culture.

## Skills

#### **Problem Solver**

Analyzing hard problems and providing quick and maintainable solutions that allow organizations to be ready for market opportunities.

Change Agent
In tune with start-up and enterprise practices, excelling at evolving engineering practices towards optimum delivery requirements.

#### Service

Communicating needs between customers, engineers and operators, helping both to focus on their respective tasks effectively and efficiently.

## **Activities**

The Codice Foundation, Founder and Board Member

Open Tucson, Founder

OVMTB High School Mountain Bike Team, Founder and Team Director National Interscholastic Cycling Association, Level I Certified Coach

# Experience AirGap / RadiantBlue Technologies Chief Engineer 2012-Present

Consulting organizations on the "modern software engineering" enterprise

- Communicating the need for enterprises to accommodate a flexible culture, to accommodate technology change, preventing debt and allowing for the right tool to be applied to the job at hand
- Analyzing existing processes and documenting infrastructure and automation opportunities
- Training on infrastructure-as-code tools (ie. Puppet, Chef) and cloud and container tools (Openstack and Docker)

Developing open source alternative solutions for defense and intelligence systems, to enable rapid and emergent innovation opportunities

- Utilizing public and private cloud technologies (e.g. Amazon Web Services(AWS): EC2, S3/Glacier, Route53, RDS, etc.; Heroku PaaS; OpenShift) as well as emerging technologies such as NoSQL, map-reduce, and dynamic software frameworks
- Consulting on continuous integration, continuous delivery and infrastucture-ascode practices
- Supporting open source operations, serving as a board member at The Codice Foundation
- Working with the Distributed Data Framework project, providing Puppet and AWS support to support dynamic provision and auto-configuration of large-scale deployments

Managing development and operation of a workflow automation engine for delivery of software components

- Architected and implemented private cloud infrastructure based on Openstack, Puppet and Docker, and augmented by AWS compute and storage resources
- Designed a workflow engine for distributed task operations using Mongo, Grails, PostgreSQL, and Activiti
- Developed Ruby microservices connecting external data sources (e.g. NIST vulnerability database, VirusTotal, fossology)
- Worked with agencies to capture security process/audit, transport, and component manifesting requirements
- Integrating Amazon Web Services for elastic test agents, and disaster recovery flows for system images and software artifacts

### MaestroDev: VP, Product Engineering 2011-2012

Led the design and development of a DevOps tool suite to support emerging enterprise markets with software development-through-operations workflow automation

- Managed a globally distributed staff of software engineers, designers, technical writers, and administrators
- Communicated with executive stakeholders regarding strategy, execution and operational needs
- Worked with customers and test sites to optimize the delivery, monitoring and operation of system components
- Built a Ruote-based workflow engine that integrated best-of-breed tools in the SCM, CI, deployment, provisioning and configuration management arena

#### Dozer Software LLC, Principal - Present

Provide rapid prototyping, system design, and software engineering services to local, defense and mining organizations

#### Accenture National Security Services: Technical Architect 2007-2010

Developed a semantic wiki/text engineering platform for document/intelligence inference for US ARMY CDI

- Processing document similarity and entity extraction algorithms to create "linkable" relationships
- Integrating open source projects Grails, GATE, UIMA, Tika, Jena to minimize costs and license constraints
- Architected for component distribution and high-scalability using publishsubscribe/XML/RDF interconnects

Architected and designed a dynamic data discovery and visualization service platform for USAF (SAF)

- Utilizing off-the-shelf software frameworks (Grails and OSGi) for maximum developmental performance
- Implemented multiple search algorithms to identify location/geo-based and other information
- Following Scrum agile software engineering methodology with geo-distributed team

Established and architected an open source contextual collaboration suite for the USAF

- Developed early prototype using Java/OSGi frameworks and HTTP interfaces
- Ported design to Ruby and Rails, RESTful, and Service-Oriented Architecture
- Published whitepapers and spoke at various Open Source and defense conferences and symposiums

Raytheon Missile Systems – Advanced Programs Principal Software Engineer 2005–2007 Developed a tactically-aware service integration platform, based on Enterprise Service Bus principals

- Created software development kit (API, documentation and tooling) for service developers
- Developed information assurance and security mechanisms to support multi-level classification support
- Participated in industry Expert Groups to drive specifications and standards towards company needs
- Operated in an Open development environment using GForge, Subversion, Maven, and Continuum

Lead engineer for the development of an unmanned system's mission computer/processing platform

 Performed processing platform trade study, researching against performance, scalability, size, weight, power, and interconnection requirements

- Supported initial flight testing of hardware, applied modifications to design as necessary
- Engineered a custom interface and mount for easy connection of communications and power adapters
- Integrated tactical and commercial datalinks to provide mobile ad-hoc network connectivity

Served as a Co-Chair of the Communications Technology Interest Group and Software Engineering Networks

- Organized and participate in large symposiums and workshops, reviewing content and managing events
- Fostered Open Technology Development and the use of Open Source software and tools

# Raytheon Missile Systems - Operations Research: Systems Engineer 2003-2005

Systems Integration Plus, Inc.: Systems Engineer 2001-2003

ITT Technical Institute: Adjunct Instructor 2001-2003

Pilot2Pilot Incorporated: President 2000-2001

Marine Corps Community Services: IT Special Projects Manager 1997-2000

United States Air Force. Wideband/Satellite Radio Technician 1990-1994

## Education

### University of Maryland, Adelphi, Maryland

December 2008

Master of Software Engineering

#### University of Maryland, Kadena AB,

Okinawa,

October 1999

Bachelor of Science in Computer Studies

#### University of Arkansas, Camp Foster, Okinawa,

September 1999

**RTOS** 

Completed training, course work and requisite projects for mid-level management certification

### Green Hills Software, Tucson, AZ

October 2003 Completed training and certification for Integrity

**Redhat**, San Francisco, CA May 2001 Completed RHCE training and certification

# Wind River Systems, Alameda, California

September 2001

Completed coursework covering  $\ensuremath{\text{VxWorks}}$  5.4 and  $\ensuremath{\text{Tornado}}$ 

2.0

# Links

"Github", Source code

"Bitbucket", Source code

"kitplummer.github.io", Blog