

# ROBERT SHADE

## PERSONAL SKILLS AND QUALIFICATIONS

- Extensive knowledge and experience in the full life cycle of successful software development
- Adept at leveraging supervisory and collaborative skills in team development and management
- Demonstrated written and verbal communication skills
- Self-motivated worker able to tackle problem solving under pressure
- Dynamic individual who builds lasting relationships with colleagues and customers
- Highly motivated to learn new skills and refine current ones

## TOOLS

**Languages/Libraries:** C#, Java (JTAPl/Spring), C, C++, Python, bash, Windows Forms, ASP.NET (Web Forms/MVC), glib, DBus, JavaScript, HTML, CSS, SQL (MS SQL/MySQL/Informix), TCL, awk, NodeJS, Angular

**Systems Integration:** Cisco Unified Call Manager (AXL, CURRI, JTAPl, IP Phone Services, Web Dialer), Cisco Unity (CUPl), Cisco Unified Call Center Express (UCCXAPI), Jabber (Web SDK, Guest), Asterisk, Google Maps API, SOAP, REST, LDAP, Embedded Devices (Intel 8051 based, VHDL)

**Operating Systems:** Windows, Linux (Red Hat Enterprise Linux/CENTOS/Ubuntu), QNX

**Networking:** Cisco IOS, Routing, Switching, IP Telephony (SIP), Mobility, DHCP, DNS, LDAP, Active Directory

## EXPERIENCE

### Planning Analyst – Test/Operations Support Contract (TOSC)

February 2018-Present

- Requirements analysis, solution design, application development, unit/integration testing, and assessment/resolution of non-conformances on the Gateways team of NASA Exploration Ground Systems (EGS)
- Responsible for acquisition of spacecraft telemetry, measurement publishing, event and alarm management, local commanding, and end-item commanding for:
  - Kennedy Ground Control System (KGCS)
  - Ground Power Unit (GPU)
  - SLS core and side boosters
  - Interim Cryogenic Propulsion System (ICPS)
  - Orion Multipurpose Crew Vehicle (MPCV)
- Telemetry data decommutated using OS/COMET by Peraton (formerly Harris)
- All code required to meet NASA standards for human rated spaceflight, facilitated by group code review

### Director, IoT Software Solutions

February 2016-February 2018

- Provided technical leadership for directly reporting software team
- Lead sales and envisioning processes for clients
- Responsible for financial performance and utilization of software team
- Chief architect and consultant for internal and external software solutions
- Consultant on security of software solutions
- Design and implementation of highly available, real time security verification and encryption gateway for vehicle telematics

### Practice Manager, Software Development

July 2013-February 2016

### Software Development Lead

July 2012-July 2013

### Sr. Software Engineer

March 2008-July 2012

*Presidio/Coleman Technologies, Inc., Orlando, FL*

- Lead design and implementation of software across all initiatives, including custom hardware development; Linux system and application development; automated Cisco/Sierra Wireless device diagnosis and configuration; and GPS tracking solutions
- Drove new product and service development, including rapid prototype development for software and hardware systems
- Served as primary technical contact for new and existing customers, both during pre- and post-sales
- Developed and supervised a six-person software development team in technical areas

- Spearheaded the growth of software development through the recruitment and training of new team members
- Drove the development of standards and best practices for design and implementation
- Collaborated with the internal hardware team on product development
- Created both pre- and-post sale customer facing documentation
- Designed and implemented system services and tools for support of Qualcomm MSM Interface (QMI) LTE Devices on Linux
- Designed and implemented Cisco Home Agent compatible MobileIP client for Linux
- Developed a custom network configuration and routing engine for custom, ruggedized Linux based routers for several Class I railroads. System managed priority based routing for several redundant wireless interfaces (802.11/GSM/CDMA). Internal devices are managed via system APIs; external, via SNMP
- Developed automated configuration and diagnosis tool chain for custom systems composed of Cisco, Sierra Wireless, Sixnet, and Red Hat Enterprise Linux computing components
- Created backend services for real-time communication with thousands of GPS enabled wireless devices simultaneously. Services provide notifications for device events via email and SMPP
- Created ASP.NET website for the configuration and viewing GPS enabled wireless devices. Live and historical data was visualized using the Google Maps JavaScript API
- Developed various configuration utilities for custom hardware devices
- Implemented a disaster recovery solution for services utilizing SQL Replication and BGP

#### **Software Architect**

February 2005-March 2008

*SARIS Technologies, Orlando, FL*

- Architect and lead developer on www.eppraisal.com. Project was built using .NET 2.0 and included development and optimization of a multi-million row database of property information
- Led maintenance and development of an existing web application written in C#, ASP.NET, and with a Microsoft SQL backend. The application was integrated with several 3rd party services including PayPal, eBay, and DOBA. Integration was achieved through a combination of SOAP and custom web services. Coordinated with clients that had their own custom brand of the application
- Provided technical mentoring to the engineering and design teams

#### **Software Engineer**

2001-February 2005

*DVS Consulting Services, Orlando, FL*

- Designed and developed database driven applications using Visual Basic, Microsoft Access, Microsoft SQL Server (Including Transact SQL stored procedures), C#, ADO.NET, and ASP.NET
- Administered a mixed Linux and Windows network used for e-Mail, web hosting, and SQL databases

### **EDUCATION**

#### **B.S. – Computer Science**

2005

*University of Central Florida, Orlando, FL*