

# JOSEPH IRVINE

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## SECURITY CLEARANCE AND CERTIFICATIONS

- ❖ United States security clearance at the **INTERIM TOP SECRET** level.
- ❖ CompTIA Security+ CE certified.
- ❖ CompTIA Network+ CE certified.
- ❖ Sun Microsystems Sun Certified MySQL Associate (SCMA).
- ❖ Microsoft Certified Technology Specialist (MCTS) – SharePoint 2010.

## PROFILE OF PROFESSIONAL EXPERIENCE AND ACHIEVEMENTS

### **Science Applications International Corporation (SAIC)**

**2013 – 2016**

#### **LEAD ENTERPRISE ARCHITECT – US ARMY**

- ❖ Managed the efforts of team members performing daily tasks, out-of-cycle maintenance, and attending to regularly scheduled maintenance windows. Provided authoritative technical leadership in senior technical role.
- ❖ Created and maintain a prioritized schedule of activities. Directed timelines for software upgrades and releases that enabled functionality or corrected defects or regressions.
- ❖ Discovered several classified spillages and found over 150,000 social security numbers improperly permission trimmed. Provided guidance and technical support to rectify both situations.
- ❖ Interfaced with a number of vendors, including Microsoft, on troubleshooting issues, managing licenses, new production acquisition, and service offerings.
- ❖ Liaised with senior military leadership. I have briefed at the general officer level to address concerns or demonstrate capabilities.
- ❖ Recommend changes as part of business process reengineering efforts. Worked on projects to automate manual processes through automated scripting efforts.
- ❖ Served as an infrastructure subject matter expert, responsible for unclassified and classified SharePoint 2010/2013/2016 farms, SQL Server, Project Server, F5, and ADFS, acting in the role of architect for a farm with over 8TB data and 125,000 users, with over 12 million documents.
- ❖ Built the official US Army Materiel Command NIPR environment using SharePoint 2013. Made recommendations on upgrade process to migrate from SharePoint 2010 to SharePoint 2013 and a path to 2016.
- ❖ Built the official US Army Materiel Command SIPR production environment using SharePoint 2013.
- ❖ Made purchasing recommendations for software and hardware as well as hiring recommendations, planning and operating under a multi-million dollar budget.
- ❖ Pioneered methodologies for migrating content between SharePoint environments with no loss of permissions through scripts I authored. Developed methods for maximizing availability and automating content migrations without the assistance of third party tools.
- ❖ Supported information assurance efforts to achieve and maintain DIACAP ATO status for an enterprise SharePoint farm hosted at DISA. Regularly participated in applying STIGs, writing acceptance of risk letters, and reviewing entries for the POA&M. Wrote and submitted Certificate of Networthiness (CoN) requests for software applications and managed expiration dates and renewals for existing CoNs. Involved in the RMF process that will be required for our systems in the near future.
- ❖ Participated in full range of technical activities during duty hours and on-call after hours, including writing PowerShell scripts; installing patches and service packs as dictated by best practice or IAVM mandates; installing SharePoint Enterprise; adding and removing servers from the SharePoint farm; designing and deploying enterprise backup strategy for SQL to include mix of full, differential, and transaction log backups; architecting a COOP solution; installing and providing troubleshooting efforts for third party software; reviewing SharePoint and system logs; supporting CAC based claims SAML authentication through ADFS and F5 Kerberos authentication; and other tasks as warranted.

**SENIOR CONSULTANT – TECHNOLOGY TEAM**

- ❖ Served as a developer in SharePoint for the Centers for Disease Control (CDC). As part of these responsibilities I built solutions for a number of different CDC programs, utilizing tools including Nintex Workflows, Nintex Forms, InfoPath, Lightning Conductor and client-side scripting. Developed a series of business intelligence dashboards utilizing Microsoft PerformancePoint and PowerPivot in tandem with SQL Server SSAS, SSIS, and SSRS. Developed an efficient way of delivering video training and recorded a series of how-to videos.
- ❖ Served as acting infrastructure lead for the HQAMC SharePoint 2010 server farm. In this position I managed and ensured the performance, continuity of operations, security, and troubleshooting for the AMC Enterprise Portal. This included management of claims-based authentication system, multi-tenancy, deployment of sandbox and farm-based solutions, SQL clustering, traffic load balancing, resource management, data and SQL backups and restores, as well as a number of other tasks required to support 22,000+ users. I relied on a number of tools, including PowerShell scripting, to perform these administrative tasks. I maintained the system encompassing dozens of servers as sole administrator for four months.
- ❖ Worked with SharePoint 2007 instantiation in support of an Air Force SIPR SharePoint project, providing assistance with a forms-based authentication solution.
- ❖ Performed work on the Gateway between the DoD enclave trusted network and the untrusted Internet in conjunction with DISA PEO-MA. Work included systems engineering tasks for the DDoS prevention system, Enterprise Email System (EEMSG), Web Content Filtering System (WCF) and Filter List Management System (FLM).
- ❖ Assisted with developing rapid prototypes for Big Data platforms, working closely with various vendors, particularly MarkLogic. Integrated disparate data sources encompassing unstructured and structured data for presentation in logistics, analytics, and geospatial layers.
- ❖ Developed and maintained a Windows 8 tablet prototype running demos that prove the flexibility and capability of Big Data offerings. Wrote apps in Microsoft Visual Studio 2012 to be Windows Store compliant.
- ❖ Acted as manager for the Huntsville Booz Allen Hamilton lab, balancing security and usability concerns.
- ❖ Interacted with current and potential future clients through a variety of different venues. Ranging from intimate client meetings with senior government staff to presentations given at technology fairs on behalf of the firm.
- ❖ Participated in writing, editing, and reviewing contract proposals for a number of different Booz Allen Hamilton efforts.

**Missile Defense Agency via Torch Technologies, Inc.****2012****PRINCIPAL ENGINEER FOR INFORMATION ASSURANCE**

- ❖ Performed software security reviews in compliance with DISA STIG guidance. Utilized automated tools including HP Fortify 360 in addition to manual code reviews. Reviewed code to ensure industry best practices for security, following guidelines outlined by SANS, OWASP, and other organizations. Ensured that vulnerabilities were removed or mitigated to help reduce the potential attack surface during deployment. Monitored CVE and CWE databases for issues that may require remediation.
- ❖ Performed Controls Validation Testing (CVT) scanning both remotely and on-site at customer locations utilizing a suite of test tools. Included tools were the Department of Homeland Security CSET, eEye Retina, Nessus, ACAS, Unix-SRR and Gold Disk. In addition, provided physical facility inspections to ensure compliance with DoD standards. Conducted interviews with ISSO/ISSM support to verify compliance with controls for which automated or manual tests were unavailable.
- ❖ Assisted with Certification and Accreditation (C&A) administration based on DIACAP standards. Reviewed POA&Ms and acted as a case manager for remote sites and programs, consulting on mitigations, participating in Technical Interchange Meetings (TIM), Information Assurance Risk Analysis (IARA) reviews, package and vulnerability analysis and acted as a liaison to government leadership.

## **General Dynamics, C4 Systems (GDC4S) via Superior Technical Resources, Inc.**

**2010 – 2011**

### **SENIOR SYSTEMS ENGINEER**

- ❖ Evaluated interfaces between software systems, developed specifications, and interacted with and resolved customer problems.
- ❖ Responsible for designing, installing and administering virtual machines running tactical software, development environments, and Windows Server operating systems using VMware.
- ❖ Regularly took backups of virtual machines and provided support for instantiating copies at off-site facilities for testing and evaluation purposes.
- ❖ Consulted with customers and other departments on project status, proposals and technical issues such as software system design and maintenance.
- ❖ Authored C# software for enhancements to the Tactical Airspace Integration System (TAIS) while using the IBM Rational product ClearCase to manage the source code baseline and ClearQuest for change management. Automated nightly builds were managed with CruiseControl.
- ❖ Worked closely with DISA on information assurance software to support TAIS releases under Microsoft Windows with IAVA compliant patches. Used DISA Gold Disk, Retina, MBSA and other tools to identify vulnerabilities. Was lead on scripting and testing patch updates to correct vulnerabilities for IAVA compliance.
- ❖ Compiled information for POA&M reports. Responsible for using forensic tools to collect, analyze and report data. Implemented logging methods to ascertain vulnerability status.
- ❖ Regularly monitored STIG directives to identify outstanding threats undetectable through automation.
- ❖ Worked on systems engineering project for AOCOI metadata to facilitate security markings for messages transmitted between software systems.
- ❖ Wrote XSLT scripts to help facilitate transfer of XML data between two disparate systems using WCF services.

## **Self-Employed Experience:**

### **iConsulting, LLC**

**2001 – Present\***

#### **PRESIDENT, SOFTWARE DEVELOPER**

- ❖ Held engineering project management position over software developers as part of a consulting position for ClearPlay, Inc., using Microsoft Project to coordinate tasks and provide dynamic forecasts.
- ❖ Designed software to monitor incoming data streams and detect error codes for NOAA (National Atmospheric and Oceanic Administration) satellites for Dynamic Labs, Inc.
- ❖ Helped setup and implement open source Oracle VirtualBox Hypervisor solution for small engineering firm, Vibrationdata, LLC.
- ❖ Worked on a digitization project to support field operations manual revisions for the United States Army for West Point, consulting through an Arizona State University program.
- ❖ Wrote Linux cron scripts to provide automatic backup of critical databases in order to provide data integrity and availability for Great Hearts Academies. Performed bash scripting under Linux to consolidate file backups.
- ❖ Developed and sell a software system to charter schools needing to perform admission lotteries. This software is used by schools across the United States. Recognized by name in Newsweek.
- ❖ Taught two summer school classes at a local high school: one provided an introduction to computers and word processing, the other focused on software development in C++. Curricula used was my own.
- ❖ Acted as database architect for Hagens Berman Sobol Shapiro, LLP., a multi-branch class action law firm. Worked as the only technical developer alongside attorneys and paralegals. Responsible for data integrity and design to specification. Database supported several major ongoing pharmaceutical class-action lawsuits.

## LANGUAGES / HARDWARE

Experience with: SQL, .NET, C++, C#, Java. Fluent with PowerShell, cron, bash, and NSIS scripting languages. Proficient in various applications: Microsoft Server, SharePoint 2007/2010/2013/2016, Office 365, F5, TMG, ISA, Active Directory, ADFS, Windows, and Linux. Expert in Microsoft Office (PowerPoint, Word, Excel, Access, Project, Visio, OneNote, InfoPath) and other PC applications. Experienced in VMWare ESX and Oracle VirtualBox virtualization products. Fluent with Retina, Nessus, ACAS, DISA Gold Disk, Unix SRR and MBSA tools.

## EDUCATION

- Bachelor of Science in Management Information Systems** **Logan, UT**  
**Utah State University**  
Honors Student; Research Fellow; Presidential Scholar; Dean's List; Koch Scholar
- Graduate Certification in Information Assurance** **Huntsville, AL**  
**University of Alabama, Huntsville**  
Cumulative GPA: 4.0
- Master of Science in Information Systems** **Huntsville, AL**  
**University of Alabama, Huntsville**  
Cumulative GPA: 4.0
- Master of Science in Nursing** **Baltimore, MD**  
**Johns Hopkins University School of Nursing**  
Unawarded degree

## PROFILE OF VOLUNTEER EXPERIENCE

- Sierra Preparatory Academy** **2015**  
**MEMBER, BOARD OF DIRECTORS**  
❖ Served as a board member at large for Sierra Preparatory Academy in Mesa, Arizona. Roles include supporting decision making, budgets, and providing leadership as a member of the governing body of the school. Particular emphasis and responsibilities focusing on technology implementation and development.
- The Phoenix Symphony Chorus** **2009**  
**BASS VOCALIST**  
❖ Performed with The Phoenix Symphony on a volunteer basis as a vocalist. Accepted after a rigorous audition process.  
❖ Took the opportunity to volunteer at smaller Arizona community events as a representative performer of The Phoenix Symphony. Highlight included the opportunity to perform on stage as part of a small ensemble with actress Debbie Reynolds in a "Singin' in the Rain" revue.
- Arizona Republican Party** **2008**  
**STATE CONTENTION DELEGATE, NATIONAL DELEGATE AIDE, PRECINCT COMMITTEEMAN**  
❖ Involved with the Arizona Republican Party during the 2008 election cycle. I was elected as a Precinct Committeeman, as well as a delegate to the state convention. In addition, I served as the only official delegate aide to the State of Arizona in St. Paul, Minneapolis during the 2008 Republican National Convention.

## HONORS / AWARDS

- ❖ National Society for Collegiate Scholars
- ❖ Beta Sigma Gamma International Honor Society
- ❖ Phi Kappa Phi Honor Society

- ❖ National Foundation for Independent Business (NFIB) – Young Entrepreneur Award, May 2006
- ❖ Boy Scouts of America - Eagle Scout Award
- ❖ Mention of accomplishments at age 17 in Newsweek article, May 8th, 2006

### PUBLICATIONS AND PRESENTATIONS

- ❖ **“A Technology-Based Approach to the Charter School Lottery Selection Process”**  
 Coauthor – Independent Research Poster  
 Presented at Research and Posters on Capitol Hill; Salt Lake City, Utah – January, 2008  
 Presented at Utah Conference on Undergraduate Research; Utah Valley State College – February, 2008
- ❖ **“Data Recovery from Corrupted/Damaged Floppy Disks and Thumb Drives”**  
 Author – Independent Research Presentation  
 Presented at Brigham Young University Computerized Genealogy Conference; Provo, Utah – March, 2009
- ❖ **“Using Probability Theory to Assess Risk in Capital Budgeting Projects: An Application to the Lodging Industry”**  
 Researcher - Associate Partner, The Research Group  
 Utah State University Student Showcase and Jon M. Huntsman Research Symposium; Logan, UT – 2009
- ❖ **“Capital Budgeting and Probabilistic Scenario Analysis: A Student Research Experience in Finance”**  
 Researcher - Associate Partner, The Research Group  
 Western Decision Sciences Institute (WDSI), 39th Annual Meeting; Lake Tahoe, Nevada – April, 2010
- ❖ **“Is Google Wallet the Best Thing Since Sliced Bread?”**  
 Author – Independent Journalism  
 KSL.com, Deseret Digital Media; Salt Lake City, Utah – June, 2011
- ❖ **“The White Hat: Hacking SharePoint On-Prem from Google Reconnaissance to MetaSploit”**  
 Author – Independent Research Presentation  
 SharePoint Saturday; Atlanta, Georgia – June, 2014
- ❖ **“What is Multi-Tenancy? The Nuts, Bolts, and Unpublished Commands”**  
 Co-Author – Independent Research Presentation  
 SharePoint Saturday; Atlanta, Georgia – June, 2016