Andrew D. Bruce

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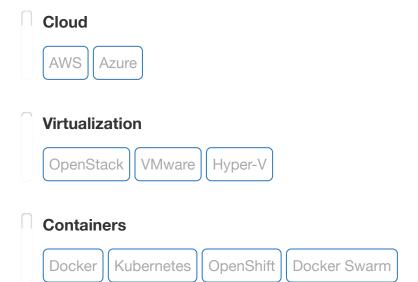
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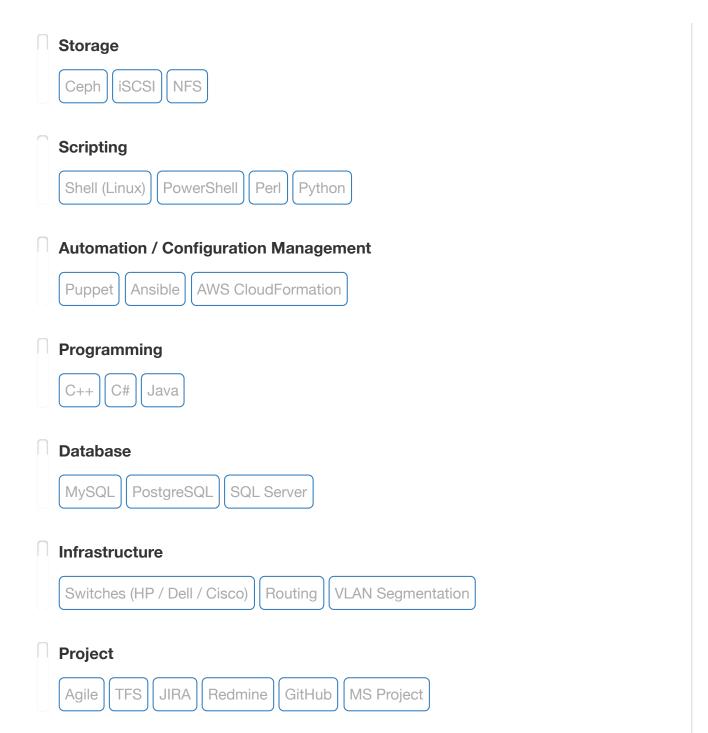
http://www.softwareab.net/wordpress/

ℹ INFO

I am a passionate believer in the power of technology to increase productivity and to reduce costs. I want to use my demonstrated cloud, virtualization and automation capabilities to help an organization streamline its daily operations, continuously improve its technical environment, assist in delivering highest-quality products on time and in budget, and delight the end-customer.

</> SKILLS

Cloud

AWS Azure

Virtualization

OpenStack VMware Hyper-V

Containers

Docker Kubernetes OpenShift Docker Swarm

Storage

Ceph   iSCSI   NFS

Scripting

Shell (Linux)   PowerShell   Perl   Python

Automation / Configuration Management

Puppet   Ansible   AWS CloudFormation

Programming

C++   C#   Java

Database

MySQL   PostgreSQL   SQL Server

Infrastructure

Switches (HP / Dell / Cisco)   Routing   VLAN Segmentation

Project

Agile   TFS   JIRA   Redmine   GitHub   MS Project

🏢 EMPLOYMENT

Contract Programmer, RiVidium

2020-07 — Present │ Programming C# Virtualization, Automation, AWS, OpenStack, Kubernetes, OpenShift, Ansible, Puppet, Network, Cyber, Storage, Linux, Windows

I provide development in C# / SQL Server / Docker / Containers for RiVidium's testbed of

emerging security technology based out of Manassas, VA.

- Lead all virtualization - both on-prem and off-prem
- Designed / implemented entire infrastructure (OpenStack, network, monitoring, automation)
- Design / build all automation using Puppet, Chef, Cobbler, CloudFormation, shell scripts
- Assist customer with estimates
- Create and present technical briefs (internal and external)
- Meet cybersecurity requirements / harden environments

Virtualization Engineer, Leidos

2014-07 — 2020-06 │ Virtualization, Automation, AWS, OpenStack, Kubernetes, OpenShift, Ansible, Puppet, Network, Cyber, Storage, Linux, Windows

I provide cloud, virtualization, network and automation support to assist Leidos with Government and commercial customers. My primary responsibilities include managing and supporting DevOps within the Leidos Managed Innovation Lab in Baltimore, MD.

- Lead all virtualization - both on-prem and off-prem
- Designed / implemented entire infrastructure (OpenStack, network, monitoring, automation)
- Design / build all automation using Puppet, Chef, Cobbler, CloudFormation, shell scripts
- Assist customer with estimates
- Create and present technical briefs (internal and external)
- Meet cybersecurity requirements / harden environments

Technical Subject Matter Expert (SME), DSCI

2013-09 — 2014-07 │ Technical Writing, Design, VMware, Linux

Provided technical expertise for proposal development as well as virtualization engineering.

- Created designs and documents related to cloud technology.
- Delivered Information Assurance (IA) artifacts and documentation to Army customer to meet Authority to Operate (ATO) requirements.
- Integrated virtualized environment at Aberdeen Proving Ground and Fort Belvoir with all IA requirements: automated scanning, patch management, Security Technical Implementation Guide (STIG) checklist application.
- Created scripts and procedures to apply IA hardening automatically and efficiently.

Lead Executive Scientist, CSC

2011-06 — 2013-09 │ VMware, Active Directory, Linux, Windows, Shell, C#

Provided virtualization development and systems engineering for U.S. Army at Fort Belvoir and Aberdeen Proving Ground.

- Key implementation architect and leader for us.army.mil
- Worked extensively with leading industry cloud vendors: F5 BIG-IP for DNS and load-balancing to backend servers; VMware vCloud Director and Application Fabric Director; full CA/AppLogic implementation to compare and contrast with vSphere; NetApp /HP for backend storage; HDS blades for the on-premises virtualization infrastructure; and, Cisco / Avaya for Layer 2 switch fabric.
- Led successful storage hypervisor virtualization project working directly with DataCore to integrate SANsymphony-V into the Army Cloud infrastructure. Drove this project from concept, to authorization to proceed from Army customer, to implementation, and resulted in a completed Certificate of Networthiness based on my implementation documents and hardening guides.
- Designed and built two virtualization infrastructures for the Army Cloud: CA/AppLogic with first-ever deployment to Hitachi Blades (required reverse engineering AppLogic host ingestion) and a complete vCloud Director environment built on top of vSphere cluster. Compared AppLogic with VMware from performance and security views and recommended VMware to Army customer.
- Led teams building the Army Cloud support infrastructure at APG and Fort Belvoir. Design and lead configuration of all VLANs, switches, routers, storage networks, and all OS-level software stacks (Windows Active Directory, RHEL, HP/Fortify, and numerous others). Managed and created all system and network documentation to meet DoD and Army Information Assurance requirements (DIACAP / DoD 8500.2 / AR25-2). Wrote Puppet scripts to automate processes and to maintain compliance with issued IA Vulnerability Alerts (IAVAs).

Chief Technical Officer, RiVidium Corp

2009-06 — 2011-05 │ SharePoint, Windows, C#, JavaScript, ASP.NET, Silverlight

Led development team in all technology efforts; formulated and expressed technical direction to senior management; presented results to customers.

- Led all security certification efforts based on CNSSI 1253 and NIST SP800-53 controls.
- Drove development efforts in support of Army Enterprise Architecture for Chief Information Officer / G-6. Member of Army Enterprise Service-Oriented Architecture Foundation.

- Architected / Built C# ASP.NET and Silverlight applications for Army customers
- Designed / Implemented Hyper-V virtualization infrastructure
- Integrated thin desktops with Hyper-V to deliver VDI to RiVidium staff
- Provided estimates and schedules for all work performed by development team
- Presented / defended work to senior management for funding / work authorization on new technology projects

Engineer Principal, CSC

2006-05 — 2009-05 │ SharePoint, Windows, C#, JavaScript, ASP.NET, C++, Java, SQL Server

Completed multiple projects for Army customers at Fort Belvoir and other facilities around the country. Responsible for design, estimates, development, delivery, and maintenance of all technology solutions.

- Built and maintained the Enterprise Solutions Competency Center at Fort Belvoir
- Created numerous SharePoint sites using C# for all plugins
- Extensive work with SQL Server as backend database
- Implemented first-ever direct CAC authentication with SharePoint (C++ ISAPI DLL); deployed to other Army sites around the country
- Demonstrated SAP automated build / integration on backend VMware stack

Independent Software Consultant, softwareAB

2002-11 — 2006-04 │ C++, Perl, Java, Visual Basic, Oracle, SQL Server, PostgreSQL

Provided development and integration solutions for a variety of customers using best-fit technology and languages.

- Tooyen (**http://tooyen.com**). Developed this online social application (Perl, PostgreSQL) which empowered Amazon sellers by allowing them to reprice their listings automatically (2003-2006).
- CITIdc (Community IT Innovators, **http://citidc.com**). Provided SQL Server, ASP.NET and DHTML design and development services (2005-2006).
- ePartners Corp: Principal infrastructure architect and technical project leader for the Public Housing Authority Management System (PHAMS, 2002-2005) written.
- Veritas Corporation: Provided Oracle DBA and PL/SQL development (2003).
- Appfluent Technology: Development for cross-platform (Linux / Solaris / NT) Oracle Call Interface (OCI) driver replacement in C++ (2002).

Director, Quality Assurance/Configuration Management, Appfluent Technology

2001-09 — 2002-11 │ C++, Linux, Oracle, Perl, Management

Lead QA and CM Teams; responsible for automated development / build environments as well as automating tests and integrating bug defect management into the development cycle.

- Implemented tight integration and accountability between QA and Engineering teams based on NIST SP800-53 and Systems Engineering Lifecycle.
- Provided hands-on technical leadership and development expertise to QA teams for test creation / automation
- Directed CM environments to permit single physical systems to adapt automatically between dev / test / prod environments using the old 'profiles' Linux project
- Presented results to senior management and articulated strategy for forward vision

Software Team Lead, EMC Corp

1998-01 — 2001-09 │ C++, Java, Linux, Oracle, Perl

Performed software development and mentored junior staff.

- Managed standard EMC Agent SDK. Platforms for this module included Open Systems (C++, numerous operating systems), Microsoft Windows/NT, Java (numerous platforms), and MVS (SAS/C and Assembler language).
- Created Perl-based automated build environment to optimize system builds across operating system environments

Software Developer, Savant Corporation / Independent Software Consultant

1986-11 — 1998-01 │ C++, Java, Linux, Windows, Oracle, SQL Server

Performed software development in a variety of languages and platforms.

- 1998-1999: Implemented custom database analysis engine for Sybase Corp. as a subcontractor with Savant Corp. of Bethesda, MD (C++, Java, CORBA).
- 1997-1998: Managed development of eight courses (four Internet-based and four paper-based) for McGrawHill/NRI (see Publications).
- 1996-1997: Led development of Savant Corp.'s "Q Diagnostic Viewer." This tremendously successful product made the "What's Hot" list for 1997 in InfoWorld (C++).
- 1993-1996: Built proprietary database and customized query extraction language, as well as extensive common frameworks development, for Landmark System's PerformanceWorks suite of products (C++, Perl, Shell).
- 1988-1992: Contract programmer for the USPS (Turbo Pascal, C++).
- 1986-1988: Trust Accounting software (Microsoft QuickBASIC/Assembler).

⭐ PROJECTS

Co-creator, Kube-for-Mac

2017-03 — Present │ Kubernetes, Mac OS X, Scripting

https://github.com/andybrucenet/kube-for-mac; Run Kubernetes on native OS X hypervisor.

Contributor, OpenStack Kolla on Kubernetes

2017-04 — Present │ OpenStack, Kubernetes, Mac OS X

https://github.com/openstack/kolla-kubernetes; Adapt kolla-kubernetes to work on Kubernetes hosted on local Mac OS X.

Creator, Sunlight Labs C# API

2010-01 — 2010-03 │ C#, Silverlight, REST

https://github.com/andybrucenet/Abr.CodeLibrary.SunlightLabs; run REST calls via C# with Silverlight support

Creator, Various Projects

2000-01 — 2004-01 │ C++, Perl, Java, Scripting

https://www.softwareab.net/softwareab/freeware/index.html; Various projects created over many years.

Creator, Technology Blog

WordPress, Perl, PHP, JavaScript, HTTP, Linux

https://www.softwareab.net/wordpress/; Articles and tips on many technologies.

🎓 EDUCATION

AWS Associate Solutions Architect, Amazon Web Services

2017-10 — 2019-10 │ https://aw.certmetrics.com/amazon/public/verification.aspx To verify: Use validation number 'W76Q8YS12BRE1GSK'

CEH, EC-Council

2017-02 — Present │ **https://aspen.eccouncil.org/verify.aspx** To verify: Use name 'Andrew Donelson Bruce' and Certification Number ECC16919383722

CISSP, **ISC(2)**

2010-06 — Present │ **https://webportal.isc2.org/custom/certificationverification.aspx** To verify: Use name 'Andrew Bruce' and Member ID 363748

PMP, **PMI**

2010-12 — Present │ **https://certification.pmi.org/registry.aspx** To verify: Use name 'Andrew Bruce' and country 'USA' (certification number is 1380110)

FITSP-Designer, **FITSI**

2010-09 — Present │ **https://www.fitsi.org/fitsi/cert.asp** To verify: Use name 'BRUCE' and Certification # 282

ITILv3, **EXIN**

2011-05 — Present │ **https://www.exin.com/NL/en/certificate-authentication** To verify: Use name 'BRUCE', Certification # 4231761.936515, Module 'ITIL® Foundation Certificate in IT Service Management'

VCP5-DV, **VMware**

2013-05 — 2015-05 │ **https://www.vmware.com** VMware 5 DataCenter Virtualization

NetApp Certified Data Administrator, Data ONTAP 7-Mode, **NetApp**

2013-06 — Present │ **https://www.certmetrics.com/netapp/public/verification.aspx** To verify: use Verification Code 'L7D4ZCRCKEE11RS4'

MSIA, **Norwich University**

2010-07 — 2012-06 │ Network Security Management│ Risk Management│ Emergency Response Management

Graduated *summa cum laude* with a degree granted in Information Assurance. Concentrated on Federal Information Assurance as a cyber-security practitioner.

BS/CIS, **Strayer University**

1991-09 — 1993-05 │ Various programming courses│ Software Development Management

Graduated *summa cum laude* with a degree granted in Computer Information Systems.

AS/MIS, **State Technical Institute**

1985-09 — 1988-05 │ C Programming│ Assembler Programming

Graduated *cum laude* with a degree granted in Management Information Systems.

⚖ GOVERNANCE

Member, FITSI Certification Committee

2016-08 — Present

Review FITSI exams and applications to validate completeness and accuracy.

⌁ AFFILIATION

Member, Upsilon Pi Epsilon

2012-06 — Present

Achieved membership based on performance at Norwich University.

Member, ISC(2)

2010-06 — Present

Member in good standing.

Member, FITSI

2010-09 — Present

Member in good standing.

Member, PMI

2010-12 — Present

Member in good standing.

➦ SAMPLES

Kubernetes / dex Dashboards

2017-08

Enable isolated Kubernetes dashboards with dex backend authentication (https://github.com/andybrucenet/kube-dex-dashboard).

compliance-masonry

2017-08

Contributed 'export' verb to export data for processing by other tools
(**https://github.com/andybrucenet/compliance-masonry**).

Customized Jenkins Slave

2017-07

Example of Docker container to extend Maven builds under Jenkins pipeline
(**https://github.com/andybrucenet/jenkins-slave-maven-nodejs**).

Run jinja2 as Docker Container

2017-08

Example on how to create minimized, Alpine-based Docker image to run jinja2
(**https://github.com/andybrucenet/jinja2**).

Kubernetes on Mac

2017-04

Kubernetes running on Docker for Mac natively
(**https://github.com/andybrucenet/kube-for-mac**).

✎ WRITING

Information Assurance Whitepapers, softwareab.net

2012

Whitepapers on Information Assurance within the Federal IT Community of Practice
(**https://www.softwareab.net/wordpress/lets-go-ia-whitepapers/**).

IA FUSION - Fusing IA into the Software Development Model, FITSI

2011

FITSI membership required; model to integrate security into the development process
(**http://fitsi.org/**).

Andrew Bruce's Blog, self

2011

Numerous articles on computer technologies and projects
(**http://softwareab.net/wordpress/**).

🏆 RECOGNITION

Summa cum laude, Norwich University

2012