Personal Details

Name	Nathan Bliss
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Nationality	British
Company Website	http://software-automation.com

Summary

BSc in Computer Science
MSc in Telecommunications
3 AWS associate certifications (2017)
AWS Solutions Architect Professional certification (2017)
CompTIA Security+ certification (2017)

Fluent in German: Able to participate in complex technical conversations fluently in the German language (C1/C2 level)
Software Configuration Management / DevOps: Git, BASH, Ansible, Linux SysAdmin (RedHat & Debian), Jenkins, Docker, Artifactory, Sonatype Nexus, AWS, Google Cloud, Git, GitLab, BitBucket
Atlassian (Bamboo, Jira, Confluence, Crowd)
Extensive LTE /4G Radio / Physical Layer / L1 knowledge and experience
WCDMA (3G), HSPA & LTE 3GPP specification experience
Customer-facing technical support of HSPA (3G Cellular) & LTE (4G Cellular)
Python, GoLang & JavaScript development experience
Web Server Development experience (Django, GoLang, Javascript, HTML5)
Semiconductor company experience: QUALCOMM Snapdragon S4 Wireless Microprocessor, Intel XMM Microprocessors

Website: www.software-automation.com

Work Experience

DevOps Engineer [Contractor working via limited company on freelance projects, based in UK]
Software Automation Solutions Ltd, UK

October 2019 - November 2019: Advanced Kubernetes training course, including Istio Service Mesh & Kubernetes Security

August 2019 - October 2019: Short-term freelance project work for clients around London via own Ltd Company:

- Improving & refactoring Ansible Playbooks
- AWS/Python Boto scripts & Linux Admin
- AZURE DevOps design, implementation & deployment including use of Terraform *azurerm_template_deployment* and use of AZURE Advanced Resource Templates (ARMs) to create & maintain AZURE cloud resources
- Use of different storage classes in AZURE: LRS (Locally Redundant Storage), GRS (Geo-Redundant Storage) & ZRS (Zone Redundant Storage)

June 2019 - August 2019:

- 2 months development effort completing my GoLang/HTML5/JavaScript DevOps tool "DevOps Orchestration Platform":
https://software-automation.com/?page_id=132#about

DevOps Contractor working on CapGemini/HMRC government project
September 2018 - June 2019 (Included 2 contract extensions)

- Ansible automation, deploying proofs of concept of master/agent monitoring technology on RedHat Linux, Prometheus / node-exporter / Grafana, ElasticStack (Kibana / ElasticSearch / Logstash / Filebeat) & Sensu Monitoring System
- Installation & Configuration of AppDynamics Application Performance Monitoring (APM), Machine Agent, Database Agent, Java Agent using Ansible
- Installation & Configuration of Naver PinPoint Java Application Performance Monitoring (APM)
- Terraform & Ansible to launch and configure RedHat-based AWS EC2 instances
- Troubleshooting IBM WebSphere components using SmartBear SoapUI
- Assisting CapGemini Release Manager with GitLab diff comparisons of branches and testing of Ansible playbook runs in order to provide reliable input into code integration decisions

June 2018 - September 2018:
- 3 months development effort on my GoLang DevOps tool "DevOps Orchestration Platform"

DevOps deployment project for **Ariva.de (Financial Services)**, based working from home via new UK Ltd company
March 2018 to June 2018:

- Rollout of Atlassian Bamboo Continuous Integration System
- Configuration of OpenLDAP & resolution of LDAP issues
- Configuration of Java & Maven and resolution of issues
- Successful deployment of Kubernetes prototype on VMWare virtual machine cluster
- Installation & configuration of Sonatype Nexus binary repository & docker registry manager
- Technical admin of TLS CSRs, certificates & keys using Java Keytool

Publication of my DevOps Article in Admin Magazine
Between March 2018 & May 2018

Publication of a Linux Admin magazine article for one of the top Linux magazines between March and June 2018.

This was also published in print-form across the UK and was available to buy in WHSmith stores across the UK in May 2018.

It was available to buy in print-form in magazine stores across the United States of America in June/July 2018.

Link to online version of article:
  http://www.admin-magazine.com/Archive/2018/44/Automated-orchestration-of-a-horizontally-scalable-build-pipeline2

Freelance DevOps Contractor, Germany
Self-Employed, working via Hays, Aservo & Montash
December 2017 - May 2018
Germany

DevOps & Software Configuration Management for Munich IoT Startup via **Hays**:

- Installation/Config of Docker-based Concourse CI on Google Cloud Platform & fixing Concourse CI issues
- Kubernetes & MongoDB Configuration
- Scripted Git / BitBucket admin
- Letsencrypt/Certbot certificate admin & config of nginx reverse proxy for SSL termination
- Monitoring script written in Bash to gather stats from Google Cloud Platform VMs
- Resolution of SSH routing issues
- Jira / Atlassian / Confluence REST API scripting

Short DevOps project for **Miele** via Aservo:

- Jenkins config & troubleshooting
- Installation of Atlassian Crowd SSO Platform for Miele and configuration for Active Directory authentication
- Generation of SSL certificates & config of nginx as reverse proxy with HTTPS secure endpoint
- Installation, configuration & REST API scripting of Sonatype Nexus on SuSe Linux
- Working ElasticStack proof-of-concept
- SSL/TLS admin

[From March 2018, starting as freelancer for Ariva.de in Kiel, Germany (via Montash); first month on-site,
then finished the 3 month contract working from home in England via new UK limited company].

LTE Software Integration Consultant (contract)
Intel Corporation, January 2017 – December 2017, Duisburg, Germany

- 4G / LTE modem support/logging/troubleshooting, Rel.13 3GPP specs
- Automation of host-based LTE/4G modem tests with Python & BASH
- Automation of MatLab host-based tests using Python & XML
- DevOps / Software Configuration Management tasks with Git, Jenkins & Gerrit

DevOps/Integration Engineer (contract)
Bosch-SoftTec GmbH, July 2016 - January 2017, Hildesheim, Germany

- Software Configuration Management & Automation using Git
- Enhancement of Jenkins continuous integration pipeline using Groovy scripts, Jenkins plugins & delivery of Artifacts
- Use of Ansible to deploy development environments & Jenkins configurations on CentOS & Ubuntu servers
- Use of Docker to 'containerize' Android development environments for Android App development team
- BASH / Python scripting & fixing issues in existing scripts
- Linux SysAdmin: Troubleshooting & fixing NFS file mount issues; troubleshooting & fixing LDAP issues
- Communicated with team members fluently in German
- Solved major logging issue using a Python script that allowed partitioning & extraction of compressed HTML payload data from logs

DevOps Engineer (contract)
Intel Corporation, March 2016 - June 2016, Munich, Germany

- Git / Jenkins / Gerrit software configuration management & build management of Android / LTE Modem builds
- Development & improvements to Python Django web server
- Developed a build automation script for local host based Android & Modem build compilation

Software Configuration Management Consultant (contract)
NXP Semiconductors, September 2014 – November 2015, Hamburg, Germany

- Software Configuration Management / DevOps for semiconductor hardware design data
- Designed & implemented multi-threaded Linux Bash & PERL scripts for automation of software config tasks
- Designed and implemented automation system to collect stats & reclaim disk storage space, saving high storage costs
- Developed multi-threaded GUI apps in Perl Tk & TCL Tk to speed up & automate Linux-based DevOps/configuration management processes. One Python script reduced an error-prone 4-6 hour task to a 100% accurate 30 second one
- Technical Support given to users for DevOps / software configuration management tasks
- Implemented SOAP protocol & associated SOAP XML templates for Collabnet/Subversion administration

Software Engineer (contract)
SONY, February 2014 – August 2014, Lund, Sweden

- Developed an Android / SIP / IMS Test Harness & extendible Framework with Wireshark, Java, ADB, Android port forwarding, Python & LUA scripts, with the Linux Netcat utility target-compiled for Android with the Android NDK
- Contributed to testing and bug-fixing of SIP / IMS Java code, , with reference to RCS 5.1/5.2/JOYN specs
- Wrote test strategy for Sony's Rich Communication Services (RCS) product, with reference to RCS 5.1/5.2/JOYN specs
- Contributed proof of concept Java code for IMAP-4 messaging project

Software Engineer (contract)
Encompass Digital Media, August 2013 – November 2013, London

- Developed a C#.NET WPF application, interfacing into an MS SQL Server relational database
- Developed optimized stored procedures on Microsoft SQL Server platform
- Developed Python & Perl scripts to carry out digital media asset management, prototype REST API framework in ASP.NET, Google Apps Script code to automate REST API based tasks

LTE Technical Support Consultant (contract)
QUALCOMM, April 2012 – April 2013, Farnborough, Hampshire

- Used Qualcomm QXDM/APEX/QCAT logging tools to find and resolve bugs and issues for Snapdragon S4 customers
- Successfully resolved baseband LTE L1, AS & NAS issues for Snapdragon S4 customers
- Appointed main Europe point-of-contact for LTE & WCDMA Inter-RAT issues
- Used 3GPP specs to resolve complex issues for customers: LTE Physical Layer, MAC, RLC, RRC, NAS, SIP & IMS layers (3GPP 36.101, 36.211, 36.212, 36.213, 25.101, 25.211, 25.212, 25.213, 25.214, 36.331, 25.331, 36.321, 36.322, 24.008, 36.306, 25.306, 24.301, 36.304, 25.304)
- IOT trips to customer labs for resolution of LTE & Inter-RAT issues for MDM9615 & MSM8960 Snapdragon S4 processors
- Developed automated log analysis Python scripts & spreadsheets for calculating throughput, verifying cell (re)selections & handovers and validating the LTE paging cycle calculations

Component Verification Specialist (LTE Layer 1)
Intel Corporation, October 2011 – February 2012, Dresden, Germany

- Utilised an Aeroflex 7100, Rohde & Schwarz SMU200 & San Jole LTE analyser to develop L1 test cases resolve issues using Java/Eclipse framework
- Use of SVN & ClearCase for source control
- Used LTE L1 3GPP specifications 36.101, 36.211, 36.212, 36.213 to debug L1 radio issues
- Successfully carried out first cabling & configuration of an Elektrobit F8 Channel Emulator for MIMO tests: UE microprocessor board <=> Elektrobit F8 channel emulator <=> San Jole Air Interface analyser (passive) <=> Aeroflex 7100 eNodeB (BTS) Simulator.

LTE Test Consultant (contract)
Anite Telecoms, February 2011 – September 2011

- Developed test cases in C++ using Anite Development Toolset
- Contributed to development of LTE Test Automation System
- Analysed HSPA+ & LTE logs and helped to resolve bugs & issues at L1, L2, L3 & L4
- Wrote LTE test plans for test simulator products
- Wrote scripts & apps in Excel VBA, Python & Perl to automate log analysis & generate graphs

HSPA+ Test Consultant (contract)
Picochip, November 2010 – January 2011

- Success Integration of 64QAM downlink with Aeroflex TM500 down to less than 1% block error rate
- Successfully ported TCL HSDPA/MAC-ehs test scripts & library to be compatible with HSPA+ and 64QAM
- Implemented calculations in TCL library for throughput & block error rates
- Ported TCL library between Aeroflex TM500 platforms

Senior Software Engineer [Femtocell Project] (contract)
Technicolor (subsidiary of Thomson), March 2010 – August 2010

- Aeroflex TM500 support & Java multi-threaded GUI programming for test automation with Aeroflex TM500
- Contributed Perl module to the team's test automation system
- Developed UMTS R99 & HSPA TTCN3 test cases & TTCN code for RANAP, HNBAP & NAS protocols
- ClearCase version control: Merging of TTCN3 code & scripted automation of report gathering for managers

Field Application Engineer (LTE & HSPA+ Technical Support)
Aeroflex, June 2008 – February 2010 (1 year 9 months)

- Protocol Stack & Physical Layer technical support of Aeroflex TM500 for WCDMA & LTE
- HSPA & LTE log analysis, including analysis of DSP logs
- Rel.7 3GPP specs: 25.211, 25.212, 25.213, Rel.8 3GPP specs: 36.211, 36.212, 36.213, 36.331
- Use of Aeroflex PXI SigGen, R&S CMU200, SMU200, SMJ100A & spectrum analysers to analyse & resolve issues
- Python scripting (including app to automate TM500 firmware upgrade)
- Provided formal LTE training presentations to customers

HSPA+ Test Consultant (contract)
Ericsson, 2007 – 2008 , HSPA+ Project based in Nuremberg, Germany.

- Contributed to HSPA test cases for HSPA+ project
- Successful installation & configuration of two prototype Ericsson IMS/SIP servers
- Analysed WCDMA logs & SIP/IMS logs & worked with developers to resolve issues
- Designed & developed test analysis system with Excel VBA, Perl & Wireshark, to automate throughput graphing

Senior Software Development Engineer
Anritsu, 2006 – 2007

- Developed UMTS/HSPA tests on MD8480 RTD system
- Developed MS Access test result database & Perl test automation scripts
- Customer technical support of UMTS RTD system

Interoperability Test Team Lead
RIM (BlackBerry), 2002 – 2006 (4 years)

- IOT of Blackberry devices at operator & vendor labs
- GSM & (E)GPRS log analysis
- Wrote test specs for GSM, GPRS, EDGE & SIM toolkit, WAP & MMS test cases
- Worked with supplier TTPCom to debug radio code
- C programming: Successfully modified Blackberry logging tool analyse signals content
- Python test scripts
- **Promoted to IOT team lead after 3 years with the company**

Professional Qualifications

November 2017: CompTIA Security+ Certification

Jun-Aug 2017: AWS Certified Architect (PROFESSIONAL), AWS Certified Developer, AWS Certified SysOps Administrator

Jul 2007, Accredited Symbian C++ Developer

May 2002, Foundation Certificate in Software Testing (BCS/ISEB)

Dec 2001, CCNA

Academic Qualifications & Experience

MSc in Telecommunications Technology (Aston University, Birmingham)
Research Project Placement: **BT Labs (Project:** IPSec and IPv6 security)

BSc 2.1 Hons Degree in Computer Science (Kingston)
Final Year Project: C++ image processing / graphics / motion analysis

3rd year industrial placement: Philips Research (C++ graphic development)
- Filed patent in image processing with Philips

Languages

German: Fluent (C1/C2 standard)