

Summary

A true versatilist archetype with a classical education in pure science.

Having worked in software development since 1998 and specifically with python for 13 years I have a proven record of improving process performance by implementing new ideas, automation and generating new tools. A self motivated, proactive, self starter with ability to use initiative, innovate and operate autonomously or mentor and collaborate with team members.

Key Skills

- Python
- Git
- FastAPI
- Ansible

- Automation (Networking, CI/CD, QA)
- Networking
- Linux
- Docker

Education

- MSc. Biochemistry, University of Reading.
- BSc. Biochemistry with Chemistry, University of Reading.
- 'A' Levels: Physics, Chemistry, Pure Mathematics and Biology.

Professional Qualifications

Cisco: CCNA, CCNP, CCDA, CCDP.

• Citrix: CCEA, CCA.

Employment History

Python Developer, Xilinx Technology (May 2020 - Jul 2023)

- Developed and built internal tools to improve development efficiency and workflows and provided automated solutions to test quality of 10-100 Gb Ethernet adapters and switches.
- Designed, built, monitored and maintained tool chains for critical functions and various dashboards.
- Identified roadblocks and inefficiencies in existing ecosystems and implemented processes/tools to remove them.
- Developed python scripts to automate development and testing infrastructure utilising libraries Nornir, Paramiko, Netmiko, Napalm and Fabric along with Ansible and Vagrant.

Self employed (Oct 2019 -Apr. 2020)

- Designed from scratch the hardware and software for an original IoT project.
- Investigated the many aspects of commercial IoT projects including legal and manufacturing requirements.
- Conducted performance testing of numerous Single Board Computers to evaluate computational and power requirements.

Fabricated a final fully operational prototype demonstrator utilising Keras / Tensorflow and OpenCV
 Python libraries with a Django management interface.

Career Break (Jan. 2019 - Sep. 2019)

Time taken to renovate house and relocate.

Software Engineer, Qualcomm (Aug. 2016 - Dec. 2018)

- Debugged issues with the Python framework and test code; defined and fixed bugs found.
 Developed new features of the test framework.
- Ensured Python environments were up-to-date and compatible with the latest language developments, and with other environments used across the company with which it interfaced.
- Supported colleagues with Python test code development. Providing training for new users of the framework and database.
- Managed software roll-out across multiple systems. Defined and developed new automation tools to make testing and debugging more efficient.
- Converted and updated legacy Python scripts & libraries from version 2 to 3.

Python Automation Engineer, Cisco (Jul. 2011 - Aug. 2016)

- Designed, developed, coded and debugged automated environments for both Development and QA departments which had a large impact on the agile Kanban two week cadences.
- Supported DevOps by providing tooling, monitoring dashboards and process automation.
- Automated microservice deployment by providing Ansible playbooks, Puppet manifests, Python scripts and Linux shell scripts.
- Supported a challenging microservice infrastructure utilising a multitude of technologies including: Oracle and Vertica DB's, CouchDB, Memcached, Squid, ETL, ActiveMQ, Redis. Virtualized environments were provided by Vagrant, VMware, VirtualBox and KVM. Containerization was provided by Docker. CI/CD was provided by Jenkins pipelines along with Git.
- Provided monitoring with the aid of ELK Stack, Grafana, Graphite and Prometheus.

Python QA Engineer, Solarflare Communications (Mar. 2010 - Jun. 2011)

- Developed and coded an automated test framework in python which along with open source & commercial tools were used to verify performance and protocol functions of 10Gb network devices.
- Created Test specifications from IETF RFC specifications for protocol verification and subsequent automation by utilising various Python libraries.
- Developed and supported various dashboards created with the Django framework.

Automation Engineer, 3Com (Feb. 2009 – Jan. 2010)

- Tested all functional and non-functional aspects of CentOS embedded software on a unified security platform, encompassing firewall, Router, web filtering, spam filtering and anti-Virus functionality.
- Utilised Spirent Smartbits packet generators, Avalanche traffic generators and automated tests with Python, Perl and Tcl.

Technical QA Team Leader, Citrix (Dec. 2005 - Dec. 2008)

- Completed many diverse full life cycle testing projects including release 4.5 of Presentation Server, XenApp, XenDesktop, XenServer and Edgesight products.
- Partial automation of the test environments were delivered with C#.

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FAQ's for Recruiters

A.

Q01. What position are you looking for? Any position that uses Python as the predominantly the main required skill: Python A. developer, DEVOPS, SDET, SRE, Automation Engineer, QA Automation, CICD Automation etc. Q02. Do you need a visa to work in the UK? A. No. I am a UK citizen. Q03. What type of work are you looking for (contract or permanent)? I am considering all types of positions at the moment. A. Q04. What salary or rate are you looking for? Market rates: I would prefer to have a look at the job specification and the proposed salary A. or rate and then I can judge if it is fair. Q05. Are you considering on-site, hybrid or remote working?

Due to my location I would prefer fully remote. However hybrid is possible but is

Q06. Why did you leave /are you leaving company X.

A. This is not relevant. I will not be responding to any obvious phishing attempts for information regarding current or previous employer.

Q07. What is your current rate or salary?

A. This is not relevant to future positions. See Q04 above.

determined by the number of required on-site days.