

Summary

A python developer with a traditional 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 time-saving 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 / GitHub
- FastAPI
- Ansible

- Automation (QA, AWS, Networks, CI/CD)
- 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 -)

- Developed the automated testing and development infrastructure frameworks
- Identified inefficiencies in existing ecosystems and implemented processes/tools to remove them.
- Developed and maintained a FastAPI reporting system on AWS EC2, S3 and DynamoDB utilizing python Lambda functions and Boto3 scripts.

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/patent 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 OpenCV 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 code development. Providing training for new users of the framework and database.
- 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 (DevOps), 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 which utilised 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.
- Utilized containerization in the form of Docker to provide consistent development environments.
- CI/CD was provided by Jenkins pipelines along with Git version control.
- Utilised monitoring tools 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 reporting dashboards utilising the Django framework.

QA 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.