Robert Pooley

Austin, TX
robpol86@gmail.com
https://robpol86.com

Sr. Software Engineer *Apple, Sunnyvale CA (May 2017 - April 2021)*
Worked in a platform sub-team within Apple Maps.
- Led a team of three other engineers to support our Airflow stack on an Apple proprietary Kubernetes platform without PVCs, creating Helm charts that other engineers and data scientists could use to bring up their own Airflow instance for their team with just a few steps.
- Wrote custom Airflow operators with tests and documentation to support spark-submit, yarn, and HDFS with KubernetesExecutor, Python3, and Kerberos support.
- Packaged and migrated five production Airflow 1.8 services from a proprietary platform to Kubernetes. Used Kustomize to define Kubernetes YAML files for both local (Docker for Mac) and remote Kubernetes clusters. Automated kubectl commands in a Makefile.
- Dockerized an internal Scala service so other engineers can run it on Docker for Mac instead of testing in production.
- Reduced build time of Docker image used in CI from 2 hours to 20 minutes by packaging internal libraries into CentOS RPMs.
- Wrote integration tests for a Python SDK for an internal Scala service, increasing test coverage from 0% to 70%. Integration tests were then used as a "smoke test" during new service releases.

Software Engineer II *Uber, San Francisco CA (January 2015 - February 2017)*
Worked in Developer Experience and in the Docker Infrastructure team.
- Worked on and then took over and rewrote a project scaffolding web service (Flask) that all engineers in the company use to create new internal and external services. Designed it so any user/team can create a code template in their own repo and have it hook into the scaffolder.
- Wrote integration tests for the scaffolder to ensure every code change in any template is thoroughly tested in Jenkins to guarantee each template works out of the box even with several contributors. Even the input form was tested for JavaScript errors.
- 95% or greater test coverage in almost all of my code (including branch coverage).
- Docstrings/comments for every class and function documenting the purpose of parameters, return values, and exceptions raised. Sphinx documentation for services included.
- Contributed to self-service web service that engineers use to provision their services in our production Docker environment.
- Worked on rewriting self-service provisioning service from Python Flask to Golang TChannel+HTTP APIs.
- Was the lead for a small scaffolding project with one other person. Split up the project into tasks for both of us to work on in parallel (me with scaffolding logic and integration testing, him with the command line interface portion and documentation).

Systems Administrator I *Twitter, San Francisco CA (August 2013 - January 2015)*
Provision RHEL/CentOS servers at scale for the entire company, managing the fleet of servers in our data centers. Troubleshooting basic hardware/OS problems on problem hosts.
- Work on automation and tooling in Python to make provisioning more efficient.
- Wrote several command line tools to monitor the provisioning status of hundreds of servers.

Skills
Kubernetes, Docker
Python
    - Flask/Django
    - PyTest
    - Airflow
    - Sphinx/Flake8 plugins
    - command line scripts
Golang (some)
Bash, Makefile
Redis/MySQL
Regex
Automation
Linux Administration

Links
GitHub (github.com/Robpol86)
Stack Overflow (/u/1198943)
LinkedIn (/in/robpooley)

Certifications
RHCE release 5.3
CompTIA A+

Past Employers
Apple
Uber
Twitter
Symantec
Wayport
teleNetwork
TISD

- Re-wrote a Flask Python application from scratch and got it running in our Mesos infrastructure with Celery tasks, Redis, MySQL (and SQLAlchemy) and Bootstrap3. Testing with pytest.
- Created dashboards with reporting data for management and the SRE team.
- Code reviews for other applications and updated code used by most of the company internally.

In addition to writing my own Python web application, I've contributed to several existing tools/applications and worked with other teams through code reviews and new features.

IT Infrastructure Specialist *Symantec, Austin TX (September 2006 - July 2013)*

Deploy applications to internal and external customer-facing production servers. Mostly Linux (Red Hat) but also Windows Server. Experience deploying with existing deployment tools or by hand in the command line/Windows GUI.

- Brief experience with Puppet and writing Rundeck jobs.
- Automated deploying a sophisticated application utilizing VMware ESX 3.5 and Linux VMs in both Python and Bash. This was done with several custom scripts in Altiris.
- Wrote a monitoring tool in Python and XML/XSLT to monitor over 100 production and nonproduction systems.
- Some knowledge in setting up and configuring Nagios.
- Brief experience with managing nodes on Big-IP F5 load balancers.

For manual deployments consisting of several Linux commands on several servers, automated repeated tasks with Bash for loops and basic exception handling to cut down on time and possible human error on the spot.

Level 1 Tech Support *Wayport, Austin TX (April 2006 - August 2006)*

- Provided technical support to business customers and travelers for internet services in hotels, retail chains (including McDonald's), apartment complexes, airports, and AT&T Wi-Fi hotspots.
- Involved setting up customer's wireless adapters, Ethernet adapters, and wireless to Ethernet bridges, as well as email and VPN connections.

Level 1 Tech Support *teleNetwork, Austin TX (August 2005 - April 2006)*

- Provided technical support for dial-up, ISDN, DSL, and DVS (DSL modem and IPTV set-top box in one) residential customers.
- Helped customers set up dial-up networking on their computers, troubleshoot connection problems, and set up their email.

Tech Support *TISD, Victoria TX (May 2003 - August 2005)*

- Provided technical support for dial-up, ISDN, DSL, and Wireless (2.4 GHz radio internet from ISP's building to the customer's location) to residential and business customers.
- Setup and troubleshoot internet connections and email. Fixed customer's computers (they could bring them into the office and leave them until they were fixed by the next day) when the issue could not be resolved over the phone, as well as removed viruses and spyware.
- Went out to businesses to set up ISDN/DSL/Wireless as well as wire computers to routers/switches and configure 802.11 access points.