Alexander Miller

SUMMARY

Distributed systems engineer with twelve years of experience in startup, enterprise, and SMB environments. Proud user and developer of open source software. Enthusiastic about contributing to improvements in self-sovereignty, with particular interest in projects that involve peer-to-peer networking or embedded systems.

WORK EXPERIENCE

CryptoKube.io (Denver, CO)

Independent Consultant, Mar 2018 - present

- ► Architected and built infrastructure for an Ethereum gaming startup
- Relased open source Ansible & Terraform code for blockchain infrastructure
- Presented Ethereum infrastructure workshop at DevCon IV in Prague, Czech Republic
- ► Currently working on Kubernetes configs for Bitcoin, Ethereum, and IPFS

ShapeShift AG (Denver, CO)

DevOps Engineer, Aug 2017 - Apr 2018

- ► Managed cloud infrastructure for a high-security 24/7 cryptocurrency exchange, processing >\$30MM/day during the peak in Dec 2017
- ► Operated internal backend & tooling, public frontend & API, and blockchain daemons on >50 networks/chains
- Built and operated automation tooling for cloud infrastructure, server configuration, and centralized logging, monitoring, alerts, and visualization
- ► Performed assorted improvements including server hardening, legacy code refactoring, and documenting architectures that evolved organically in a fast-paced startup environment

Endless Computers (San Francisco, CA)

Distributed Systems Architect, Oct 2016 - Aug 2017

- Migrated Endless OS build infrastructure to AWS using Ansible
- Created REST interface for in-house API using Python Flask
- Architected a cloud-based data pipeline for metrics analysis (HDFS, YARN, Hive, Spark, Zeppelin)
- Assisted with analytics queries, data visualization, and generating reports for business stakeholders

Hortonworks, Inc. (Santa Clara, CA)

Senior Product Specialist - Tools, Jan 2016 - Aug 2016

- ► Led initiatives to centralize tools used by the Support organization
- Automated provisioning of virtual HDP clusters for education and issue reproduction
- ► Conducted weekly analysis of production-down support cases to generate new requirements for SmartSense data collection and rule definitions, assisted w/development
- Authored training exercise to certify support engineers on competence of the customer-facing SmartSense tool and use of the backend service (highest participation rate of all exercises)
- Analyzed support case data with a Zeppelin notebook to identify areas of greatest concern

Hortonworks, Inc. (Durham, NC)

Platform Support Engineer, Sep 2014 - Dec 2015

- ► Supported enterprise customers for diagnosing, reproducing, and fixing advanced components of the Hortonworks Data Platform
- ► Took ownership of problem isolation, resolution, and bug reporting
- Drove internal knowledge management initiatives and assist the frontline support team
- Created Salesforce dashboard, which was opened for use by entire Support organization
- Subject Matter Expert for: AppDev (Storm, Kafka, Pig, Hive), Security (Knox, Ranger, Kerberos, LDAP, SSL), and Hadoop (HDFS, YARN, MapReduce, Zookeeper)

Modea (Blacskburg, VA)

- Architected, built, and maintained hybrid cloud infrastructure (AWS + baremetal) for SaaS platform
- ► Co-developed mobile device virtualization backend
- ► Researched Android platform & internals to optimize device images
- ► Created diagrams & documentation for both technical reference and marketing purposes
- ► Ansible, Jenkins, Node.js, Mocha, AWS (EC2, S3, CF, ELB, IAM), New Relic, Android SDK, Qemu

Modea (Blacskburg, VA)

Network Operations Manager, 2007 to 2013

- Scaled IT operations from 12 inital employees to support >100 employees (vSphere, SAN, Cisco)
- ► Managed hosting infrastructure at Rackspace for client projects
- ► Maintained annual budget, led disaster recovery initiative as part of business continuity plan
- ► Hired help desk employees, established relationship with MSP to take over expert roles

TacPro Systems LLC (Blacksburg, VA)

Owner, 2013 to 2014

- ► Performed independent IT services and consulting for small enterprises
- ► Infrastructure improvement plan, P2V server consolidation, backup system repair & upgrades

EDUCATION

Virginia Tech (Blacksburg, VA) B.S. in Computer Engineering, 2013

CERTIFICATIONS

Certified Bitcoin Professional - Crypto Currency Certification Consortium, 73073f - Mar 2018 **Apache Hadoop Administrator 2.x** - Hortonworks, license 008-00176 - Feb 2015 **Apache Hadoop 2.0 Java Developer** - Hortonworks, license 006-00136 - Nov 2014