

PRINCIPLES

Open source
Automation
Documentation
Security

INTERESTS

Peer-to-peer systems
Containerization
Embedded/IoT

WORK EXPERIENCE

CryptoKube.io (Denver, CO)

Independent Consultant, Mar 2018 - present

- ▶ Architected and built infrastructure for an Ethereum gaming startup
- ▶ Released 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 (Blacksburg, VA)

DevOps Engineer, 2013 to 2014

- ▶ 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 (Blacksburg, VA)

Network Operations Manager, 2007 to 2013

- ▶ Scaled IT operations from 12 initial 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