

Harrison Totty

SENIOR DEVOPS ENGINEER · SOFTWARE PROGRAMMER

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Summary

Current Senior DevOps Engineer within the Production Operations group at Basis Technologies. Highly experienced at implementing custom infrastructure solutions within both cloud and on-premises environments.

Work Experience

Basis Technologies (Formerly Centro, Inc.)

Remote

SENIOR DEVOPS ENGINEER

Feb 2021 - Present




- Spearheaded company adoption of Kubernetes (EKS).
- Wrote terraform code for managing infrastructure hosted in AWS.
- Architected networking and external secrets implementation for Kubernetes.
- Authored ISO-style technical standards documents and department blog posts.
- Implemented serverless data pipelines using AWS Lambda & Step Functions.

Wolfram Research, Inc.

Champaign, IL


DEVOPS ENGINEER

Apr 2018 - Feb 2021

- Streamlined disaster recovery of Wolfram Cloud user data with end-to-end encrypted backups via  backuputil.
- Provisioned bare-metal Kubernetes environments for Wolfram|Alpha utilizing Kubespray, Helm, Rook-Ceph, and Velero.
- Incorporated Hashicorp Vault for secrets management of Kubernetes CI/CD pipelines.
- Implemented infrastructure as code (IaC) standards for on-premises environments by leveraging  Puppet and .

WEB SYSTEMS ADMINISTRATOR

Dec 2016 - Apr 2018

- Developed a  templating engine for Apache HTTP Server configurations.
- Collaborated custom log data analysis and reports for Wolfram Cloud in Python and Mathematica.
- Designed Salt configurations for managing internal infrastructure.
- Developed backend code for the Wolfram Cloud Platform in Java.

WEB SYSTEMS INTERN

Sep 2016 - Dec 2016

- Implemented new Wolfram kernel features in C/C++.
- Developed a containerized RPM build environment hosted in Apache Marathon/Mesos.

Skills

Amazon Web Services	ALB/ELB, Cloud Formation, EC2, EKS, IAM, Lambda, RDS, Step Functions, Secrets Manager
Containers & Orchestration	Docker, Helm, Kubernetes (managed & unmanaged)
Data Science	Jupyter Lab/Notebooks, Mathematica, matplotlib, plotly, sympy
Infrastructure Management	Ansible, Cobbler, Crossplane, Puppet, Saltstack, Hashicorp Terraform, Hashicorp Vault, Velero
LAMP Components	Apache HTTP Server, HAProxy, keepalived, MySQL (Percona XtraDB Cluster), NGINX, Apache Tomcat
Networking Fundamentals	ARP, CIDR, Mikrotik RouterOS, TCP/IP & OSI Model, Ubiquiti Unify Controller, VLAN
Operating Systems	Alpine Linux, Arch Linux, Debian (Ubuntu), Gentoo, RHEL (CentOS), Void Linux, Microsoft Windows
Programming Languages	C/C++, C# .NET, Emacs Lisp, groovy, Perl, Python, Rust, Shell Languages
Software Engineering	Bitbucket, git, GitHub, GitLab, Harness CI/CD, Jenkins, JIRA
Systems Administration	chronyd/ntpd, DNS (BIND/Unbound), init (SysVinit/systemd), OpenLDAP, postfix, rsyslog, SSSD, ulimits
Templating Languages	Cheetah, Embedded Ruby, Jinja, Liquid

Education

Tallahassee Community College

Tallahassee, FL

ASSOCIATE OF SCIENCE

Jan 2015 - Jan 2016

- Graduated honors with 4.0 GPA.