

Tim Olson

St. Paul, MN

A passionate software engineering generalist targeting all things Linux and Kubernetes.

Sr. Site Reliability Engineer | K8s Platform Eng

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Experience

Languages and tooling

Python (9y 2012)	Containers (5y 2016)	Prom (5y 2016)
Golang (3y 2018)	K8s (4y 2017)	Gatekeeper (1y 2021)
Rust (1y 2020)	AWS (4y 2017+)	Istio (2y 2020)
CSS / HTML (5y 2014)	Terraform (4y 2017)	Perl, C++, Java (201X-2016)
Typescript (3y 2018)	Consul (2y 2020)	Various CICD (5y 2016)
Ansible (5y 2016)	Linux (16y 2006)	

Required Env

Linux Laptop
tmux, vim, zsh, i3

Linux the base, K8s for orchestration, Embrace F/OSS tooling inside.

What I look for...

To be part of a motivated team where we: Work with Kubernetes. Strongly value culture. Stay up to date with an evolving cloud native industry. Foster individual and collective growth. Follow an evolving SRE methodology.

Misc

Unrestricted remote work
Value conferences/learning
Use/Contrib open source software

Employment History:

Sr. Site Reliability Engineer

Feb 2022 – Present

Reddit Inc, Remote - Saint Paul, MN

Sr. Site Reliability Engineer

Feb 2020 – Feb 2022

SPS Commerce, Minneapolis, MN

I looked for a new job that would embrace my PaaS and SRE skills revolving around Kubernetes. SPS provided a challenge to build the next generation container platform as a technical owner. On the SRE team I quickly moved to a senior position in the team being a point person for consulting and always happy to join and advise on incidents.

- Built Terraform+AzDo+EKS pattern. Heavily leveraging TF modules and intelligent scripting to lifecycle and safely drain nodes. This pattern is now expanded to support multi-regional EKS.
- Created the team/user authentication RBAC deployments and OIDC strategy. As well as service account OIDC mapping to AWS IAM roles via go controller; migrating from kube2iam.
- Responsible for promoting and supporting the Kube PaaS product, building and delivering a positive DX through walkup embedding and advocating at internal meetups.
- Developed and maintained an internal service catalog which maps services to; teams, monitoring/observability, dependencies, SCM, and change management guardrails.
- Technical owner for AKS infrastructure and tooling, like EKS using; TF pipelines, helm infrastructure deploys; cert-manager, kube-prometheus, ingress-nginx, etc.
- Active in multi region strategy utilizing global accelerator and istio.
- Mentored interns guiding them through a “Summer in the Life of” an SRE. Teaching and giving hands on experience with python PaaS tooling/microservices, as well as POCing velero/

Software Engineer

May 2018 – Feb 2020

VERITAS Technology LLC, Roseville, MN

After outgrowing the limits Docker on VMs, my team built bare-metal/vm K8s clusters to be used by multiple teams within the business tools division. I expanded beyond my app development work on the Insight team to also become the SME for Kubernetes in our division. I was recognized for my work with K8s, joining a new team which provides automation and infrastructure for the greater organization.

- I brought our K8s clusters under one roof, owning additional clusters beyond those I originally built. I modified the deployments to make them mirror the model I established, helping simplify node lifecycle and upgrades across all our clusters.
- I built an extensible celery-beat-rabbitMQ stack that was handed off to our resident data scientist, providing an easy way to reproducibly build async data collection/reporting microservices.
- I helped my Infrastructure-As-Code teammates build microservices, such as services for handling request intake, and for winning a hackathon by implementing a pipeline to create VMs that are derived from NetBackup test configs.

Associate Software Engineer

May 2017 – May 2018

VERITAS Technology LLC, Roseville, MN

While still an intern I was provisionally assigned to a new team at VERITAS. Following the success of my Elasticsearch POC I was brought onto the Insight team before graduating college. The Insight was team chartered to provide the NetBackup organization with business/engineering metrics. There my team quickly adopted a 12 factor microservice methodology, eventually leading us to platforming to K8s.

- Built a deployment for bare metal kubernetes. We followed some of the principles defined by CoreOS for self-hosted Kubernetes in 2017: etcd running on host, control plane as pods in the cluster, kube-router BGP peering service IPs to get around not having a cloud load balancer provisioned using custom IPMI PXE boot tooling, matchbox, and terraform for secret management.
- Led a second intern project the following summer. We developed a pluggable Prometheus stack to K8s which allowed any engineering team to view metrics (grafana) and receive alerts (alertmanager).
- DBA-ed PostgreSQL schema such as: the business logic used by Horizon, our internal build and test pipeline tool results, and various small microservice DBs populated by async workers.

Software Engineer Intern

October 2015 – May 2017

Maverick Software Consulting/VERITAS Technology LLC, St. Cloud, MN

Within 6 months of my internship I became the team lead and scrum master and remained in this position for the duration. I was responsible for communication with our Veritas product owner. As an intern, I developed several tools and applications which are still in production today (Q32019).

- Scrum master of a team of 6 locally, while working closely with partner teams in China and MN
- Responsible for recognizing sprint priorities by partnering with business shareholders.
- Built a machine learning (scikit KNN/DT) algorithm which would automatically match new test failures to existing failures, saving the organization significant time and money.
- Developed and deployed a tools portal to be used by all NetBackup engineers to identify the influx of a given failure as discovered by the analysis tool.
- Senior member of Maverick, responsible for training new hires on our development process and systems such as git, linux/VMs, microservices, NetBackup testing infrastructure.

Education:

Bachelor of Science, Computer Science

August 2012 – March 2017

St. Cloud State University, St. Cloud MN *ABET Accredited*