SREERAM VENKITESH

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I'm a software engineer who likes to tinker with code and greatly appreciates learning how things work from first principles. I love attending conferences and have <u>given several talks</u>.

PROFESSIONAL EXPERIENCE

BigBinary

July 2021 – October 2024 (3 years and 4 months)

- Architected and built <u>neetodeploy.com</u>, a cloud deployment platform as a service, on top of Kubernetes, from scratch with 2 other engineers. Designed <u>key microservices</u> of the system like the addon and database provisioner, the central API which orchestrates deployments within the cluster and the image builder which builds OCI compatible images from code.
- Architected and built the sleep when idle feature by studying alternatives like Knative and Keda and brought down the cloud cost considerably while running over 500 deployments.
- Built the metrics and observability stack for NeetoDeploy with Prometheus, Grafana, Loki and prometheus-adapter to run HorizontalPodAutoscaler with custom metrics from Prometheus.
- Migrated from nginx ingress controller to Traefik Proxy. Researched and experimented with the Kubernetes Gateway API for Traefik and <u>Laver 4 TLS</u> for exposing databases outside K8s.
- Wrote the <u>neetodeploy CLI</u> for connecting to shells inside deployments and to stream logs from outside the cluster. Wrote several <u>blog posts</u> for the BigBinary blog.
- Routinely did cluster upgrades, onboarded and helped new team members with Kubernetes.

OPEN SOURCE

Kubernetes

October 2022 – Present (2 years)

- Added support for allowing zero value to Pod PreStop Lifecycle Hook's Sleep Action.
- Implemented <u>version skew</u> for InPlacePodVerticalScaling feature's beta graduation.
- Ongoing work for adding support for <u>custom stop signals for containers</u> in Kubernetes.
- Ongoing work for adding <u>CEL support to CRD additionalPrinterColumns</u>.
- Received the Contributor Award at Kubernetes Contributor Summit NA 2024, Salt Lake City.
- Served in the release team as a shadow in the enhancements team for <u>v1.29</u> and <u>v1.30</u>, the **enhancements team lead** for <u>v1.31</u> and as a release lead shadow for the current <u>v1.32</u> release.
- Made <u>several contributions</u> to the documentation and serves the position of the SIG Docs
 New Contributor Ambassador by hosting a call for onboarding contributors every month.
- Writes and publishes the <u>Last Week in Kubernetes Development newsletter</u> every week where I study and report all the PRs that are merged into kubernetes every week.
- Smaller <u>bug fixes</u> made in kubernetes/kubernetes.
- Made a total of 325 contributions across 10 repositories in the Kubernetes project

TALKS

- <u>Understanding Kubernetes internals by running a cluster from scratch, KCD Kerala 2024</u>
- The Two Sides of the Kubernetes Enhancement Proposals, KubeCon China 2024
- <u>The Hitchhiker's Guide to Testing Kubernetes</u>, Maintainer Summit, KubeCon India 2024

EDUCATION

Mar Athanasius College of Engineering

August 2017 - June 2021

Bachelor of Technology in Electronics and Communication Engineering (8.09 CGPA)

SKILLS

General: Docker, Kubernetes, Kubernetes internals, Unix and Linux, Vim, general systems administration, working with VMs and cloud networking, PostgreSQL, Redis, Terraform, Ansible. **Programming Languages**: Go, Ruby, JavaScript, Bash scripting.

Frameworks: Ruby on Rails, React.js Cloud Providers: AWS, Microsoft Azure, DigitalOcean