

Shreyas Rao

Senior Software Engineer

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Senior Software Engineer with **7 years of experience** designing and scaling resilient **distributed systems** in cloud-native environments. Proven expertise in **Kubernetes, Golang** and **Platform Engineering**, with a strong track record of driving architectural decisions, optimizing system reliability, and fostering team-wide collaboration and engineering excellence. Australian citizen eligible for an [E-3 visa](#) to work in the US.

WORK EXPERIENCE

Senior Software Engineer

August 2018 – Present

SAP Labs, India

- Engineered and maintained core modules of [Gardener](#), an **open-source** Kubernetes-Clusters-as-a-Service platform, orchestrating **10,000+ clusters** across **AWS, GCP, Azure and Openstack**.
- Directed the architecture and rollout of **high availability** for Gardener Kubernetes control planes to improve **uptime from 96% to 99.5%**, while optimizing operational costs by **\$300K+ annually**.
- Designed robust **backup and restore** solutions using **Golang based Kubernetes operators** ([Etcd-druid](#), [Etcd-backup-restore](#)), safeguarding **400TB+** of critical cluster data and eliminating data loss incidents.
- Achieved **RPO of 5 minutes** and reduced **RTO from 12 hours of 30 minutes** for Kubernetes clusters.
- Established **software engineering best practices**, including pair programming, test-driven development, and CI/CD enhancements, boosting test coverage from **40% to 90%** and reducing production issues by **60%**.
- Incorporated monitoring tools like **Prometheus, Grafana and AlertManager** to identify cluster issues **5x faster**.
- Enhanced **operational efficiency via Kubernetes CRDs to reduce debugging time by 20%** and drive resolution of critical incidents during **Developer-on-Duty (DOD) rotations**.
- Exhibited senior-level leadership since 2022 by leading **team of 4 developers, mentoring 6 junior engineers**, and **driving architectural decisions** around disaster recovery that delivered **\$100K in cost savings**, leading to official promotion in 2024.

LEADERSHIP EXPERIENCE

Team Lead, Gardener

April 2020 – Present

SAP Labs, India

- Pioneered recruitment efforts for the team by **interviewing 50+ external candidates** to expand team size from 2 to 20, achieving a remarkable **900% growth within two years**.
- Owned project management for the team, streamlining sprint planning to boost **PR churn rate by 50%**.
- **Mentored 6+ new team members** while streamlining the project onboarding process, accelerating integration into team culture, and cutting **onboarding time by over 50%**.
- Spearheaded presentation efforts at **two international KubeCon events** and a **Kubernetes Bangalore Meetup** event, showcasing Gardener's cloud-native innovations to **1000+ attendees**.

SKILLS, CERTIFICATIONS & PUBLICATIONS

Skills – Golang, Python, Kubernetes, Docker, Etcd, Distributed Systems, System Design, Cloud Computing, Linux, GitHub, DevOps, CI/CD, Terraform, Prometheus, Grafana, AWS, GCP, Azure, Openstack

Certified Kubernetes Administrator – Linux Foundation, December 2020 – Present

SAP Leadership Academy – SAP Labs India, August 2024

"Bodhisattva – Rapid Deployment of AI on Containers" – a technical paper describing a mini PaaS for AI training, inference and serving, IEEE CCEM 2018

EDUCATION

PES University, Bangalore, India

August 2014 – June 2018

Bachelor of Technology in Computer Science, Minors in Business Management