

Prashant Nandipati

prashantnook.in

@itspacchu

@prashantnook

prashantn@riseup.net

Skills

Programming Languages: Python, Golang, Bash;

Key Technologies: Linux, Git, Docker/Podman, Kubernetes, Helm, Terraform/Tofu, Ansible;

Cloud Platforms: AWS (EC2, ECR, EKS, IAM, Lambda, RDS, Route53, S3), Cloudflare;

Tools: Grafana, Prometheus, Fluentbit, Loki, Jaeger, OpenTelemetry, SonarQube;

Certifications

Certified Kubernetes Administrator

Mar 2024

Cloud Native Computing foundation

Experience

Site Reliability Engineer *Infracloud*

Mar 2025 - Present

Kubernetes DevOps Engineer *Zigram*

Jan 2023 - Mar 2025

- Worked on migration of legacy docker container based deployments to Kubeadm Kubernetes deployments for 20+ projects.
- Led setup of On-prem infrastructure for Production Kubernetes environment using *Kubeadm* and *Ansible* and worked on migration of resources from AWS EKS to On-prem.
- Performed *Linux/UNIX* server maintenance, security compliance and upgrades, on multiple Linux distros (*Ubuntu, Debian, and RedHat based*), using **Ansible** and **Bash**.
- Built *Kubernetes Operators* in *Golang* to automate cluster maintainance and reduce manual workloads.
- Automated AWS Infrastructure using **Terraform/Tofu** to provision, upgrade and manage *EKS, RDS, EC2, S3, Lambda and Route53*.
- Implemented multi-cluster observability using *Fluentbit, Loki, Prometheus, Grafana and OpenTelemetry*.
- Worked on templating *Jenkinsfiles* and *K8s* manifest files using *Python + Jinja + Kustomize*, for 50+ repositories.
- Created custom helm charts for internal projects to be deployed through *ArgoCD*.
- Developed internal cli tools using *Golang* and *Python* for Kubernetes automation via client-go and AWS Automations via boto3.
- Configured and managed *NGINX* for *on-premises* applications, ensuring optimal performance, config modularity and traffic distribution.
- Collaborated with teams using *JIRA* for *Agile* project management, tracking progress and ensuring efficient sprint planning.

Software Developer *IIIT Hyderabad*

Jun 2022 - Jan 2023 (8 months)

- Migrated application deployments to container based deployment using Docker and setup CI/CD using GitLab.
- Built a Digital Twin of the campus, visualizing IoT nodes. Using Python and FOSS tools with OneM2M servers.
- Designed a Nodes with WiSUN Mesh Technology, featuring an Electronic Ink Display.
- Implemented OneM2M API in Python for HomeAssistant integration and device control.
- Developed Custom ESPHome sensors using C++ for interactivity with OneM2M API.
- Worked with ESP8266/ESP32 boards using MicroPython and C++ for sensor interfacing and building API endpoints in Python using Flask.

Backend Developer *WorldOfAtlantida (Part time)*

Apr 2022 - Dec 2022 (8 months)

- Developed and maintained a Chatbot bot for automation and community management.
- Implemented CI/CD pipelines using GitHub Actions for automated testing and deployment.
- Containerized the application using Docker and hosted it on GitHub Container Registry (ghcr.io).
- Deployed and managed the bot on a Linux server, ensuring uptime and efficient resource utilization.

Education

B.Tech in Electronics and Communication Engineering

Jawaharlal Nehru Technological University

Projects

Homelab | *K8s, Go, Python, GitHub Actions*

Nov 2021, Present

- Built an automated deployment pipeline using GitHub Actions for prashantnook.in.
- Set up a selfhosted Kubernetes cluster with k3s and used Cloudflared for proxying.
- Configured a Samba server for local file sharing and media storage.
- Hosted image/game servers, a document server, and a self-hosted Git instance for backups.

AWS Secrets K8s operator | *Go*

Jan 2025

- Kubernetes Operator to automatically rotate AWS ECR Credentials for onprem clusters.
- Supports Automatically fetching Region and Account ID from image URI
- Reapplies secrets on ImagePullBackoff Pods.

Kube2loki | *Go*

Nov 2024

- Utility to stream logs from Kubernetes pods to a Loki instance using client-go.

OneM2M Kiosk | *Python (Flask), C++, Docker*

Oct 2022

- Developed a kiosk API to connect to OneM2M and retrieve data from a Wi-SUN network.
- Implemented automatic updates with GitHub Actions to Self hosted node and Docker based deployment.

University Results Scraper | *Python, GitHub Actions*

May 2020

- Scraping University results using Python's beautifulsoup.
- Storing and fetching respective results to MongoDB.
- Docker swarm to parallely scrape multiple colleges at once.

Awards and Honors

Best Technology, Korean Electronics Technology Institute Hackathon (KETI)

2022

Runners up, Sainya Ranakshetram CTF

First Place, i3ndya's IOT Challenge IITB