CHARAN N

Bengaluru India | charann.cd23@rvce.edu.in | 9008213905 | linkedin.com/in/charan-nagaraj

github.com/charan-sharan

Education

R.V. College of Engineering, Bachelor of Engineering in Computer Science   Sep 2023 – Present
- CGPA: 9.41/10

Technologies

Languages: C++, C, Python, Bash Scripting

DevOps & CI/CD Tools: Docker, Kubernetes, GitHub Actions, Ansible, Terraform

Development Boards: Raspberry Pi, ESP32, Arduino

Collaboration & Version Control: Git, GitHub, JIRA

Cloud Platforms: AWS, DigitalOcean

Experience

Summer intern, HPCC Systems – Alpharetta, GA   May 2024 – Aug 2024
- Implemented GitHub Actions Scripts to improve the continuous Integration pipelines
- Migrated the regression testing scripts that ran locally to GitHub Actions
- Designed and implemented a GitHub Actions workflow file to automatically test documentation for broken links, improving the quality of project documentation

Projects

Private Cloud Cluster Setup on Raspberry Pi
- Designed and deployed a private cloud cluster using 12 Raspberry Pi nodes to build an IoT infrastructure.
- Set up monitoring using Prometheus, Grafana, and Node Exporter for real-time metrics and cluster health.
- Deployed open-source alternatives to enterprise tools including S3, Slack, Jira, and GitHub.
- Implemented Networking, Configured DNS resolution and set up a reverse proxy to manage traffic across services and ensure efficient routing
- Implemented security best practices such as VPN for remote access, a bastion for central access, etc.

GitOps CI/CD Pipeline Automation   link | link
- Implemented CI pipeline using GitHub Actions to automate testing, Docker image building, and pushing images to Docker Hub.
- Configured Kubernetes manifests for application deployment.
- ArgoCD was deployed to monitor the GitHub repository for manifest changes, enabling automated Kubernetes updates.

Resume as Code   link

Automated LaTeX Resume Pipeline using Terraform, GitHub Actions & AWS
- Designed a CI/CD pipeline to test, build and deploy my resume to S3 bucket.
- provisioned the infrastructure(S3 and IAM) using terraform.
- Integrated spell-checking, link validation, and automated build triggers on pull requests.

Linux Security Hardening   link

Developed bash scripts to automate Linux server security configurations, that includes:
- Creating non-root users for secure access.
- Changing default SSH ports.
- Disable root login and password-based login and replace it with key-based login.