

Nishant Singh

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Education

Indian Institute of Information Technology Bhopal

B.TECH IN INFORMATION TECHNOLOGY | GPA: 8.76

Bhopal, MP

Dec, 2021 – Present

Work Experience

Cloud Native Computing Foundation (CNCF)

LFX MENTEE | OPEN SOURCE CONTRIBUTOR

Salt Lake, USA

Sept, 2023 – Present

- Improved the security and management functionality of KubeArmor for virtual machines (VMs) by expanding its feature set by 15% and enhancing the capabilities for unorchestrated containers and non-kubernetes environments
- Developed and optimized 3 real-time configuration interfaces (via karmor.yaml, gRPC, and CLI), enabling real-time updates to security settings without the need for service restarts. Increased configuration efficiency and flexibility, reducing manual intervention
- Streamlined the installation and policy management process by refining the karmor CLI for VMs, reducing installation time by 25%, while also extending CLI capabilities to enable faster policy management, resulting in a 20% reduction in operational overhead

GoComet Pvt Ltd

DEVOPS ENGINEER INTERN

Bangalore

Oct, 2023 – Present

- Established a robust monitoring infrastructure by configuring alerts for PostgreSQL 13, specifically targeting the long idling transactions, locks and max concurrent connections, providing immediate visibility into potential issues and enabling swift resolution
- Spearheaded the daily deployment process of production code through a enhanced rolling deployment strategy on Kubernetes, orchestrating seamless updates across 5+ systems and leveraging automated tools to minimize downtime & enhance system reliability
- Enhanced operational insights by setting up Fluentd logging agent to push detailed, enriched application logs to New Relic, facilitating comprehensive analysis and streamlined troubleshooting the intricacies and heightened understanding of application behavior

Mobilicis India Pvt Ltd

DEVOPS ENGINEER INTERN

Remote

Jun, 2023 – Oct, 2023

- Executed a successful comprehensive migration involving the seamless transition of 300+ repositories from Bit Bucket to GitHub
- Implemented comprehensive testing methodologies and conducted over 50 robust tests to guarantee the establishment of secure and enabled hierarchical access controls for the repositories and the CI/CD pipeline, thereby enhancing overall development efficiency
- Pioneered successful implementation of 8+ robust Jenkins-based CI/CD pipeline, automating build, test, and deployment processes

The Renal Project

DEVOPS ENGINEER INTERN

Remote

Jul, 2022 – Apr, 2023

- Led the design, implementation, and maintenance of automated CI/CD pipelines for code deployment using GitHub Actions, resulting in 30% improvement in development and testing efficiency by strategically eliminating 70% of manual deployment processes
- Administered successful migration of 4+ servers from Oracle Cloud Infra to AWS Cloud, employed Terraform to implement declarative methodologies and facilitated the adoption of AWS Elastic Kubernetes Service (EKS), replacing traditional Docker deployment

Projects

GoLoadBalancer

tesla59/GoLoadBalancer

GO, DOCKER, LOAD BALANCER, CONCURRENCY

- Developed GoLoadBalancer, an automatic load balancer with round-robin functionality, inspired by Kubernetes operator architecture
- Leveraged Goroutine and Docker to spawn 3+ load balancer to balance the incoming load and 5+ workers to handle incoming request
- Incorporated SQLite 3 Database to store and provide real-time statistics such as of all workers such as average failure rate and delay

WhisperWeb

tesla59/whisperweb-backend

GO, FIBER, REST APIS, SQLITE, DOCKER

- Coded a HTTP Server using Fiber web framework in Go for back-end using SQLite 3 as the DBMS to store and retrieve data
- Designed the front-end part using Next JS 13 capitalising Server-Side Rendering (SSR) pattern to enhance performance and experience
- Containerized the website using Docker ensuring portability and reliability across different environments and easy deployment

Skills

Languages: Go, Rust, TypeScript, JavaScript, Ruby, Dart, Python, Kotlin, C, C++

Tools: Docker, Kubernetes, Terraform, Ansible, Git, ArgoCD, SQL, Jenkins

Frameworks: Flutter, React JS, Gin, GoFiber, Gorm, Express JS, Next JS

Platforms: Linux, AWS Cloud, Azure, Google Cloud Platform, Oracle Cloud Infrastructure

Certificates

Jan, 2024	Google Cloud Certified Professional Cloud Architect , Mastered certification for the Google Cloud Professional Cloud Architect exam, showcasing expertise in architecting secure and complex solutions with high scalability and availability on the Google Cloud Platform	Google Cloud
Nov, 2023	Google Cloud Certified Associate Cloud Engineer , Achieved certification as a Google Cloud Associate Cloud Engineer, showcasing proficiency in designing, implementing and managing cloud solutions on the Google Cloud Platform and mastery in skills within Google Cloud	Google Cloud