

Prem Kumar Raghava Manoharan

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Education

Northeastern University, Boston, MA

- Master of Science, Software Engineering System

Expected **August 2024**

Sri Venkateswara College of Engineering, Sriperumbudur

- Bachelor of Technology, Information Technology

August 2020

Work Experience

Software Engineer Cloud Services Coop

May 2023 - Dec 2023

Motorola Solutions, Boston MA

- Engineered a resilient Azure Kubernetes cluster deployment, utilizing Helm for microservices management, and leveraged GitHub Actions to automate workflows, significantly enhancing deployment efficiency and operational scalability
- Spearheaded the development of a Terraform-based Infrastructure as Code (IaC) solution, cutting deployment time by half through the automation of infrastructure provisioning and configuration optimization across multiple environments
- Implemented and integrated a robust CI/CD pipeline using GitHub Actions and Terraform, enhancing the team's deployment capabilities and enabling more reliable and faster infrastructure deployments iterations
- Led initiatives to refine pipeline architectures for better environment isolation, resulting in a 30% reduction in integration conflicts and a 50% increase in code release frequency
- Efficiently handled on-call duties, promptly addressing, and resolving system issues, which reduced downtime by 45% and increased customer satisfaction ratings by 30%

Cloud Engineer

October 2020 - July 2022

Larsen and Toubro Infotech, Chennai, India

- Revamped the deployment process of OpenText Documentum D2 on Azure Kubernetes Services, integrating automated workflows with Azure CI/CD Pipelines and Ansible, and established a robust disaster recovery setup
- Developed and implemented a comprehensive performance monitoring solution using Grafana Dashboards, enabling proactive monitoring and management of over 100 Azure resources and On-Prem Servers
- Authored and deployed a custom script for advanced log analysis, facilitating quicker identification and resolution of alert codes by integrating with Azure Log Analytics
- Played a critical role in the research and remediation of the log4j vulnerability, ensuring the security and integrity of 100+ on-prem and cloud servers
- Led R&D efforts for integrating Graylog with Documentum D2 applications for improved log management, significantly reducing troubleshooting time and enhancing system reliability

Software Developer Intern

January 2020 - May 2020

Retail9 Ventures, Bangalore, India

- Collaborated with an agile team to transform a monolithic architecture into a microservices-based application, resulting in a 40% increase in user engagement through enhanced scalability and system responsiveness
- Designed and deployed PHP scripts using cronjobs to automate previously manual processes, achieving a weekly savings of 10 hours and significantly enhancing operational efficiency and system reliability

Mobile Developer Intern

January 2019 - May 2019

Mocero Health Solutions, Chennai, India

- Initiated and developed a cross-platform Patient Management App with Flutter, ensuring operational consistency and seamless user experience across Android and iOS platforms, thereby improving user accessibility and engagement
- Engineered a robust mobile application using a Test-Driven Development (TDD) framework with Flutter, significantly enhancing code quality and maintainability, which led to reduced development cycles and increased application stability

Technical Skills

Cloud Platforms: Proficient with Microsoft Azure, AWS, GCP and specialized in hybrid cloud environments

Infrastructure as Code (IAC): Terraform, Azure Resource Manager and Cloud Formation

Continuous Integration/Continuous Deployment (CI/CD): Azure DevOps, GitHub Actions, GitLab

Containerization and Orchestration: Docker, Kubernetes, Helm, OpenShift, NGINX

Scripting and Programming Languages: Advanced skills in Shell, PowerShell, Java, Python, Go focused on automation

Monitoring and Logging: Grafana, Prometheus, Azure Log Analytics, Cloud Watch, ELK

Databases and Data Management: RDBMS, NoSQL, Redis, Memcached

System Management: Strong background in Linux systems, including debugging and network traffic management.

Version Control and Automation: Git, Ansible, Jenkins, Puppet, Chef

Frontend and Backend Development Frameworks: Flutter, React.js, Nodejs, Spring Boot

Networking: Understanding of HTTP, DNS, TCP/IP, and Load Balancing strategies critical for large-scale service delivery

Data Streaming and Event Processing: Apache Kafka, Azure Event Hubs, Amazon Simple Queue Service (SQS)

Certifications

Certified Kubernetes Administrator (CKA), AZ - 104 Microsoft Certified Azure Administrator Associate, HashiCorp Certified Terraform Associate