

KARTHIK MANAM

Minneapolis Minnesota-United States karthikmanam@gmail.com / 612-666-3875 **WWW:** linkedin.com/in/karthik-m-379a49184

SUMMARY

Skilled and results-oriented DevOps Engineer with extensive experience in automating, optimizing, and managing scalable, reliable systems in cloud and on-premises environments. Proficient in CI/CD pipeline design, infrastructure-as-code (IaC), and configuration management tools such as Jenkins, Docker, Kubernetes, Terraform, and Ansible. Demonstrated expertise in cloud platforms like AWS, Azure, and Google Cloud, coupled with strong scripting abilities in Python, Bash, and PowerShell.

Adept at streamlining software delivery processes, improving system reliability, and fostering collaboration between development and operations teams to accelerate product delivery. Known for implementing robust monitoring, logging, and alerting systems to ensure uptime and operational efficiency. Committed to driving innovation, reducing operational costs, and enabling teams to deliver high-quality applications at scale.

SKILLS

- Tools Customization
- CI/CD
- Database programming
- Solutions Deployment
- Usage scenarios
- Web applications
- Virtualization and Cloud
- Performance Optimization
- Infrastructure Automation

- Security Management
- Problem-Solving
- System Monitoring
- API Integration
- Network Management
- Scripting and Automation
- Backup and Recovery
- Access Control
- Documentation and Compliance

EXPERIENCE

Senior Software Engineer – Infrastructure / Konica Minolta Business Solutions

04/2023 - 03/2024

- Architect, implement, and maintain high-performance, scalable, and reliable infrastructure to support the organization's software platforms and applications.
- Analyze current systems and infrastructure, identifying areas for improvement to enhance performance, efficiency, and stability.
- Work closely with developers, DevOps teams, and other stakeholders to ensure seamless integration of infrastructure components into the software development lifecycle.
- Develop and enforce robust security measures to protect infrastructure, ensuring compliance with industry standards and organizational policies.
- Establish and manage monitoring systems to ensure infrastructure uptime and swiftly address any incidents or performance bottlenecks.
- Provide technical guidance and mentorship to junior engineers, fostering a culture of continuous learning and improvement.

- Develop, automate, and maintain continuous integration and continuous delivery (CI/CD) pipelines for efficient and reliable deployment of applications across environments.
- Design, deploy, and manage Azure cloud resources to ensure scalability, reliability, and cost-effectiveness for enterprise applications.
- Work closely with software developers, testers, and operations teams to streamline processes and improve software delivery cycles.
- Implement monitoring solutions using Azure Monitor, Application Insights, and Log Analytics to ensure system performance, health, and availability.
- Create and manage infrastructure as code (IaC) templates using tools such as ARM, Terraform, or Bicep to automate resource provisioning and configuration.
- Apply security best practices, manage Azure Policies, and ensure systems comply with organizational and industry standards.
- Develop PowerShell scripts, Azure CLI commands, and other automation solutions to streamline recurring operational tasks and system configurations.

DevOps Engineer / Verizon Communications

10/2019 - 04/2020

- Design, build, and optimize continuous integration and continuous delivery (CI/CD) pipelines to ensure efficient, automated deployment processes.
- Implement Infrastructure as Code (IaC) solutions using tools such as Terraform, Ansible, or Cloud Formation to streamline resource provisioning and configuration management.
- Set up monitoring and alerting systems to track application performance, resource usage, and system health, ensuring optimal uptime and reliability.
- Integrate security measures into the DevOps workflow, including vulnerability assessments, secure code practices, and compliance with industry standards.
- Continuously evaluate and refine deployment processes, incorporating feedback and new tools to enhance speed, reliability, and scalability.
- Research and adopt the latest DevOps tools, methodologies, and best practices to keep processes innovative and aligned with industry trends.

DevOps Engineer / Target

04/2018 - 09/2019

- Build and manage robust continuous integration and continuous delivery (CI/CD) pipelines to automate software delivery and deployment processes.
- Develop and manage IaC solutions using tools like Terraform, Ansible, or CloudFormation for efficient and scalable infrastructure provisioning.
- Work closely with software developers, testers, and IT operations teams to enhance workflows, resolve issues, and streamline delivery cycles.
- Design, deploy, and optimize cloud-based infrastructure across AWS, Azure, or Google Cloud, ensuring reliability and cost-efficiency.
- Develop scripts and tools to automate routine operational tasks, improving efficiency and reducing manual intervention.
- Stay informed about new tools, technologies, and methodologies, incorporating them into the DevOps ecosystem to drive innovation and efficiency.

DevOps Engineer / Minnesota IT Services

03/2017 - 03/2018

- Develop, manage, and optimize continuous integration and delivery pipelines to streamline the software deployment process.
- Collaborate with development, QA, and IT operations teams to improve workflows, resolve issues, and

- ensure seamless software delivery.
- Deploy and optimize scalable cloud resources on platforms such as AWS, Azure, or Google Cloud to meet organizational needs.
- Embed security practices into DevOps pipelines, including automated testing, vulnerability assessments, and compliance checks.
- Develop scripts and processes to automate repetitive tasks, reducing manual effort and operational inefficiencies.
- Continuously research and adopt new tools, technologies, and methodologies to enhance workflows and maintain a competitive edge in the industry.

DevOps Engineer / Bank of America

07/2016 - 02/2017

- Create and manage automated deployment pipelines to ensure reliable and repeatable software releases.
- Utilize tools like Chef, SaltStack, or Terraform to automate infrastructure provisioning, and ensure consistency across environments.
- Monitor and fine-tune systems for high availability, scalability, and performance, leveraging modern observability tools.
- Regularly review and enhance DevOps workflows, integrating feedback and emerging technologies to boost productivity.
- Incorporate security automation tools and practices into the DevOps lifecycle, ensuring compliance with organizational and industry standards.
- Share knowledge and provide mentorship to team members on DevOps tools, practices, and methodologies, fostering a culture of continuous learning.

System Administrator / HSBC

12/2012 - 09/2015

- Oversee the installation, configuration, and maintenance of servers, networks, and operating systems to ensure optimal performance and reliability.
- Continuously track the health, performance, and availability of IT infrastructure, resolving issues proactively to minimize downtime.
- Apply security protocols, manage firewalls, and conduct regular vulnerability assessments to safeguard systems against threats.
- Develop and manage reliable backup and disaster recovery plans to protect critical data and ensure business continuity.
- Provide technical support to users, addressing hardware, software, and network issues with efficiency and professionalism.
- Create and update documentation for system configurations, processes, and policies, ensuring compliance with organizational and regulatory standards.

Linux Administrator / Infor Global Solutions

06/2010 - 11/2012

- Manage the installation, configuration, and ongoing maintenance of Linux servers to ensure optimal performance and reliability.
- Use monitoring tools like Nagios, Zabbix, or Prometheus to track system health and address performance issues proactively.
- Apply Linux security best practices, including user account management, firewalls, and patch updates, to protect systems from vulnerabilities.
- Develop and implement scripts using Bash, Python, or similar tools to automate routine server management tasks.
- Configure and manage backup solutions, ensuring data integrity, and rapid recovery in case of system

failures.

 Diagnose and resolve hardware, software, and network-related issues in Linux environments to ensure minimal downtime.

EDUCATION

PhD: Cloud Computing (AI/ML) University of The Cumberlands	Expected in 2025
Master's degree : Network and Communications Management DeVry University	2018
Master of Technology - MTech: Software Engineering Jawaharlal Nehru Technological University, Kakinada	2014
Bachelor's degree: Electronics and Instrumentation Engineering Acharya Nagarjuna University	2011

CERTIFICATIONS

- Certificate of Cloud Security Knowledge (CCSK)
- ICA: Istio Certified Associate
- CAPA: Certified Argo Project Associate
- CCA: Cilium Certified Associate
- CGOA: Certified GitOps Associate
- CKAD: Certified Kubernetes Application Developer
- CKA: Certified Kubernetes Administrator
- CKS: Certified Kubernetes Security Specialist
- AWS Certified SysOps Administrator Associate
- AWS Certified Solutions Architect Associate
- AWS Certified Developer Associate
- AWS Certified DevOps Engineer Professional
- AWS Certified Security Specialty
- Microsoft Certified: Azure Administrator Associate
- Microsoft Certified: DevOps Engineer Expert
- Microsoft Certified: Azure Security Engineer Associate
- Google Associate Cloud Engineer
- Google Cloud Professional DevOps Engineer
- HashiCorp Certified: Terraform Associate
- HashiCorp Certified: Vault Associate
- PCA: Prometheus Certified Associate

REFERENCES

References available upon request.