Vishnu Reddy Karam

Dayton | LinkedIn | 937-999-2123 | vishnuvardhank04@gmail.com| GitHub| Portfolio |

PROFESSIONAL SUMMARY

DevOps Engineer with 3+ years of experience in cloud computing, containerization, and automation. I have a proven ability to design, implement, and manage scalable and reliable cloud-based applications. I am proficient in AWS, Azure, and Google Cloud Platform, and I have strong skills in programming, scripting, and automation.

EDUCATION

University of Dayton **Dayton, Ohio**

Master of Science in Computer Science *GPA: 4.0*

- Coursework: Machine Learning, Data Visualization, Data Mining, Distributed Systems & Cloud Computing.

School of Engineering and Technology Jain University **Bangalore, India**

Bachelor of Engineering in Computer Science *August 2014 - May 2018*

- Research in enhancing the user experience in mobile applications. GPA: 9.71/10.

CERTIFICATIONS

- **AWS Certified Developer – Associate**
- **Microsoft Certified: Azure Developer -Associate**

WORK EXPERIENCE

University of Dayton **Dayton, Ohio**

DevOps Student Worker *June 2022 – Present*

- Reduced the time to deploy new features by 50% by migrating the university's web applications to Kubernetes, a container orchestration platform.
- Automated the deployment of new features and bug fixes using a Azure DevOps pipeline with Jenkins, Docker. This increased the uptime of the university's web applications by 99.9%, which translated into a significant improvement in the user experience.
- Implemented a monitoring solution using Prometheus and ELK Stack, which tracked the performance of the university's cloud infrastructure and detected and resolved a security vulnerability that could have exposed sensitive data.
- Configured security measures for the university's cloud environment, including IAM roles, RBAC, and SSL/TLS.
- Automated Azure VM deployment with Terraform, significantly reducing provisioning time for dev and test environments.
- Optimized Azure infrastructure for dev and test environments by using Azure Virtual Machines and Azure Load Balancers to improve performance, reliability and efficiency.

Accenture **Bangalore, India**

DevOps Engineer *February 2021 - April 2022*

- Ensured site reliability, security, and availability on the Azure platform by migrating 100+ Flink, NiFi, Elasticsearch, and Prometheus applications to AKS, resulting in a 99.9% uptime SLA.
- Managed Kubernetes charts using Helm on Azure, resulting in reduction in time to deploy new applications.
- Implemented a production-ready, load-balanced, highly available, fault-tolerant, auto-scaling Kubernetes cloud infrastructure and microservice container orchestration on Azure.
- Involved in the development of a test environment on Docker containers and configured the Docker containers using Azure Kubernetes Service.
- Created clusters using Azure Kubernetes Service (AKS) and worked on creating 1000+ pods, replication controllers, replica sets, services, deployments, labels, health checks, and ingress by writing YAML files.
- Scheduled, deployed, and managed container replicas onto a node cluster using Azure Kubernetes Service (AKS).
- Created Terraform modules for creating infrastructure on Azure and Google Cloud Platform (GCP), which have been used to deploy 10+ production applications.
- Used Azure App Service for deploying and scaling web applications and services developed with Java, PHP,

Node.js, Python, Ruby, and Docker on familiar servers such as Apache and IIS, which has resulted in a 100% uptime SLA.
- Worked on writing Python scripts to restrict users sending granular metrics to Azure Monitor.

SLK **Bangalore, India**

DevOps Engineer (Cloud Automation Engineer) *September 2019 - January 2021*

- Developed and implemented a monitoring solution for all AWS services via terraform, cloud watch, AWS Kinesis Firehose and Splunk. This resulted in a 10% reduction in meantime to resolution (MTTR) for performance issues.
- Integrated HashiCorp vault with Google cloud for secure storage of google credentials. This reduced the risk of data breaches.
- Designed and deployed a fully automated Jenkins pipeline to create google project, enable APIs, roles, policies via terraform, TFE (Terraform Enterprise), python, vault and Jenkins. This reduced the time to create and manage Google cloud projects.
- Developed and responsible for maintenance of PowerShell scripts and terraform code to retrieve certificates from Venafi and deploy them on AWS and Azure to protect sensitive data. This reduced the risk of data breaches.
- Implemented Dynamo DB auto scaling and data pipelines via terraform, AWS CLI and PowerShell for Non-prod and prod environments. This improved the performance and scalability of Dynamo DB.
- Prepared Jenkins templates and wrote python wrappers for terraform code deployments via an automated CI/CD pipeline.
- Wrote unit tests using the pester framework for the key automation code to maintain and test code quality at any point in time.
- Designed PowerShell code for infrastructure testing to meet compliance and security requirements.

Incede Technologies **Mangalore, India**

Associate Software Engineer *August 2018 - August 2019*

- Upgraded and tested an existing web app for internal communications using **Angular** and **Jasmine**; enhanced user experience and extended the userbase by three times.
- Investigated server performance and optimized it to reduce the load on the database by over 70%, by migrating from **MySQL** to **Redis** using **Node**.
- Reduced the number of QA defects by 40% by implementing professional engineering practices including unit testing and documenting the APIs using **Swagger**.

TECHNICAL SKILLS

- Programming Languages: C#, Python, Bash, Go, JavaScript
- Cloud Platforms: AWS, Azure, Google Cloud Platform
- Database: Oracle, SQL Server, MongoDB, RDS
- Operating System: Windows Server 2008/2012/2016/7/8, Linux (Ubuntu, Centos, RHEL)
- Web/Application Servers: Apache, Tomcat, Nginx, WebSphere, WebLogic, JBoss
- Version Control: Bitbucket, GitHub Enterprise, SVN TFS (Team Foundation Server)
- CI/CD Tools: Docker, Jenkins, Kubernetes, Ansible, Chef, Terraform, Azure DevOps, Maven
- Monitoring Tools: Nagios, Cloud Watch, Splunk, Log Analytics
- Environments: Active Directory, DNS, IIS 6.0/7.0/7.5, Fiddler, Wireshark, Performance Monitor, PowerShell, Visual Studio Code, Office Suite, Azure AD Connect

PROJECTS

- Implemented a DevOps pipeline for the Amazon Prime clone project, leveraging Jenkins for continuous integration, Docker for containerization, and AWS for deployment, ensuring seamless delivery of the application and efficient development processes.
- Employed DevOps practices in the development of the carpool application for University of Dayton students, utilizing Jenkins for automated builds and deployments, Docker for containerization, and AWS for hosting the

application, resulting in streamlined development workflows and reliable deployment processes.
- Implemented **ML algorithms** (FNN, LSTM, CNN) over VerBio and Facial Expression Recognition datasets.

LEADERSHIP and VOLUNTEER EXPERIENCE

- **Organized** conference proceedings, managing 100+ speakers check-ins with 5 parallel presentations for 3 days, arranging the event logistics for the International Hackathon Conference, 2017.
- **Led** a team of 3 for SAE Baja 2018 and designed a system to reduce braking distance by 5 feet using computer vision; managed procurement and project management of an ATV with a team of 30.
- **Volunteered** for The Street Store and helped gather and distribute essentials for people in need.