VENKANNA BABU KOLLA

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PROFESSIONAL EXPERIENCE

Over 5 years of experience in Application engineer with a strong background in designing, developing and deploying cloud-based enterprise solutions. Specializes in AWS services including EC2, S3, Lambda and IAM. leveraging a wide array of technologies such as AWS, Python, Linux, Jenkins, Docker, Terraform, and Kubernetes. Experienced in working with all stages of DevOps processes such as CI/CD pipelines and automated testing. Skilled at leveraging CloudFormation templates to rapidly deploy applications on the cloud while ensuring high availability and scalability throughout the software development lifecycle of projects. Proficient in Agile methodologies with a focus on delivering high-quality solutions. Strong communicator and continuous learner, committed to staying updated with industry trends.

EXPERIENCE

Brilliance Jewelers, Arlington, USA   **March 2022 – Present**
Software developer (Freelance)

➤ Developed and implemented a comprehensive software solution tailored for a jewelry store, streamlining their operations and enhancing their customer experience.
➤ Designed and implemented **NoSQL database** for product listing through the file system.
➤ Implemented UI based on design and backend of the software to update the purchase, inventory and customer details.
➤ Reduced manual errors and increased efficiency by automating the inventory management process using **Django** for backend logic and **Python** for scripting and automating tasks.
➤ Managed inventory data with **MySQL** and created an intuitive user interface using React.js for easy interaction.
➤ Integrated frontend and backend with **REST API**, tested with **Selenium**, and deployed the system on **AWS** for reliability and scalability.
➤ Monitored the application's performance using **AWS CloudWatch** and New Relic for real-time analysis.
➤ Developed and automated **CI/CD pipelines** using **Jenkins** to streamline testing and deployment processes.
➤ Integrating Selenium for automated **UI** testing and **JUnit** for unit testing, which ensured efficient bug identification and smooth application performance.
➤ Provided timely support to clients experiencing issues with the software, including troubleshooting errors, resolving bugs, and guiding them through technical difficulties.

Cognizant, DevOps Engineer   **Dec 2018 – April 2021**

➤ Configured and deployed applications on **Unix/Linux** systems in Azure cloud environment for Agilent Technologies, ensuring seamless integration and scalability.
➤ Configured AWS services including **EC2, S3,** and **DynamoDB** using infrastructure as code methodologies, resulting in a 25% reduction in manual errors.
➤ Utilized **Kubernetes** for container orchestration, managing and scaling microservices effectively, resulting in improved fault tolerance and resource utilization.
➤ Utilized **Terraform** to implement **Infrastructure as Code**, automating the provisioning of cloud resources and reducing deployment time by 50%.
➤ Orchestrated **CI/CD pipelines** using **Jenkins & GitLab**, configuring **automated build, test,** and **deployment processes**, resulting in a streamlined software delivery pipeline and improved release velocity.
➤ Developed **Bash**, **PowerShell** scripts for automated deployment and maintenance tasks, reducing manual effort by 40%.
➤ Orchestrated infrastructure provisioning with **Kubernetes, Terraform,** and **CloudFormation**, decreasing provisioning time by 35% and enhancing scalability.
➤ Managed infrastructure configurations using **Ansible**, automating the provisioning and configuration of servers and applications, leading to improved system stability and consistency.
➤ **Developed** and **maintained Ansible playbooks** for application installation and operational tasks, ensuring streamlined processes and efficient deployments.
➤ Designed and implemented an automated deployment pipeline using **Jenkins**, **Docker**, and **Kubernetes**, reducing deployment time by 50%.
➤ Configured Build and Deployment jobs using Atlassian **Bamboo**, facilitating continuous integration and deployment pipelines for software delivery.
➤ Established CI/CD pipelines using **Jenkins** and **GitLab CI/CD,** ensuring rapid and reliable software delivery.
➤ Implemented monitoring and alerting solutions with **Prometheus** and **Grafana**, enhancing visibility into system health and performance.
➤ Utilized **Puppet** for configuration management, defining and enforcing system configurations across heterogeneous environments, ensuring compliance and reducing configuration drift.
➤ Optimized **SQL queries** and **database** performance, analyzing query execution plans and indexing strategies, reducing query

execution time and enhancing overall system efficiency.
- ➢ Utilized **AWS Glue for ETL** (Extract, Transform, Load) processes, orchestrating data ingestion and transformation workflows, enabling seamless integration with data lakes and analytics services.
- ➢ Implemented **Git version control** with **GitLab**, configuring branching strategies and merge policies to facilitate collaborative software development and version control management.

Nielsen Sports, cloud engineer   **Oct 2017 – Aug 2018**

- ➢ Spearheaded the adoption of **Agile methodologies**, particularly the Scrum framework, to foster collaboration and transparency within the development team. Conducted regular sprint planning, retrospectives, and daily stand-up meetings to optimize team productivity and ensure on-time project delivery.
- ➢ Managed **AWS cloud infrastructure**, optimizing resource utilization and cost-effectiveness for Nielsen Sports' applications.
- ➢ Orchestrated the migration of legacy applications to **AWS cloud**, leveraging CloudFormation templates to automate infrastructure provisioning.
- ➢ Implemented **Continuous Integration** and **Continuous Deployment pipelines** using **Jenkins** and **Artifactory**, facilitating seamless software delivery and deployment.
- ➢ Collaborated with development teams to design scalable and resilient architectures for new applications, ensuring high availability and performance.
- ➢ Conducted performance tuning and optimization of **AWS services** to meet stringent **SLAs**, resulting in a 30% improvement in application response times and cost savings of 15%.
- ➢ Implemented automated deployment strategies leveraging **Docker containers** and **Kubernetes clusters**, ensuring consistent and reliable deployment of microservices-based applications.
- ➢ Deployed and managed applications on cloud platforms such as **AWS** and **Azure**, leveraging services like **AWS Lambda**, **Amazon API Gateway,** and **Azure API Management** to build scalable and resilient architectures.
- ➢ Developed **RESTful APIs** to facilitate communication between microservices, ensuring interoperability and scalability of distributed systems.
- ➢ Optimized **SQL queries** and **database performance** to enhance the efficiency of data retrieval and processing, reducing query execution time and improving overall system performance.
- ➢ Actively participated in cross-functional collaboration efforts, collaborating with product managers, designers, and QA engineers to gather requirements, define user stories, and prioritize features.

SKILLS

- ➢ Proficient in Unix/Linux systems administration and troubleshooting.
- ➢ **programming languages**: Python, JavaScript, SQL, Bash, YAML, JSON.
- ➢ **Cloud Platforms:** Azure, AWS (EC2, S3, EKS, CloudFormation, Lambda, DynamoDB, IAM, API Gateway, SAM, VPC, Route53, Event Bridge, SNS, SQS, RDS), Azure (API Management, Databricks, Data Lake).
- ➢ **DevOps Tools**: Git, GitLab, Docker, Jenkins, Ansible, Maven, Terraform, Kubernetes, CloudFormation, and ARM.
- ➢ Hands-on experience with CI/CD tools like Jenkins, GitHub, and Artifactory

EDUCATION

Masters in Information Technology Management, Webster University, San Antonio, Texas
Bachelor of Technology, Electronics and Communication Engineering, Jain University, Bangalore, India.