Sunil Kumar Kanakappagari

Cloud DevOps Engineer

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PROFESSIONAL SUMMARY

DevOps Engineer with three years of experience in IT Infrastructure and Application Development. Skilled in automating cloud infrastructure operations using Ansible and Terraform, and managing AWS and Azure platforms. Proven ability to streamline build and deployment processes with Jenkins and GIT. Dedicated to enhancing IT operations efficiency and scalability through continuous learning and adoption of new technologies.

SKILLS

Version Control: GitHub, Subversion.
Cloud Computing: AWS, Azure, GCP.
CI Tools: Jenkins, Bamboo.
Application Servers: Tomcat, WebLogic, Jboss.
Scripting languages: Bash, YAML, PowerShell, JSON, Groovy.
Programming Languages: Java, Python.
Web Development: JavaScript, Angular, ReactJS, NodeJS, PHP, XML, HTML, CSS.
Database Management: MySQL, MS SQL Server, MongoDB, Postgres.
Operating Systems: Windows, Linux, CentOS, Redhat, Ubuntu, Scientific Linux.
Virtualization: VMware, Hyper-V.
Configuration Management Tools: Terraform, Chef, Ansible, Puppet.
Build Tools: Ant, Maven.
Container and Orchestration: Docker, Kubernetes.

EDUCATION

Master of Science, Information Technology Graduation: April 2024
University of Cincinnati, Cincinnati, OH
Bachelor of Technology, Computer Science and Engineering Graduation: August 2020
Mahatma Gandhi Institute of Technology, Hyderabad, India

EXPERIENCE

DevOps Engineer November 2020-October 2022
Cognizant, Hyderabad, India
Project: Standard Chartered Bank AgileOps.

- Coordinated with Development, Database Administration, QA, and IT Operations teams throughout the software development life cycle (SDLC) to prevent resource conflicts and ensure smooth project execution.
- Managed AWS IAM services by creating user/group accounts and attaching policies to control access and enhance security.
- Orchestrated the deployment of fault-tolerant AWS instances, ECS clusters, and scalable infrastructure components like Elastic Load Balancers and Auto Scaling groups, ensuring high availability and performance for critical payments processing systems.
- Defined AWS Security Groups acting as virtual firewalls to control incoming traffic and configured VPCs, subnets, Internet Gateways, S3 buckets, and Route 53 under the Amazon Cloud environment.
- Utilized Jenkins and GIT to automate build and deployment processes, resulting in reduced deployment times and increased workflow efficiency.
- Installed and configured monitoring tools such as Mantis and Splunk to ensure system performance and reliability.
- Leveraged Maven and ANT to boost build efficiency by 30%, reduce build times by 20%, and enhance deployment workflows, resulting in timely project deliveries and higher team productivity.
- Developed and implemented Bash and Shell scripts to automate continuous deployment tasks, enhancing overall efficiency and reducing manual errors.
- Automated the application build automation and deployment process by creating Jenkins CI/CD pipelines, which integrated Maven for building WAR files and Docker for containerizing and deploying applications.
- Deployed code on Apache servers, ensuring seamless application delivery and reduced downtime.

Tools/ Environment: AWS (EC2, S3), GitHub, Subversion, Jenkins, Apache Tomcat, Apache Ant, Maven, Shell Scripting (Bash), Jdk1.7, MYSQL, Mantis, MongoDB, Centos.

Program Analyst Trainee February 2020-August 2020
Cognizant, Hyderabad, India

Project: ITC InfoTech

- Worked closely with Project Managers to comprehend the scope of code/configuration releases and confirm successful deployments.
- Implemented continuous integration processes using Jenkins, enhancing the efficiency and reliability of builds and deployments.
- Analyzed and resolved conflicts related to merging source code in GitHub, maintaining code integrity and stability.
- Actively participated in sprint planning sessions and daily stand-up meetings to ensure timely progress and effective communication.
- Utilized Jira for issue reporting, status tracking, and activity planning, ensuring transparency and accountability.
- Extensively used Maven for builds, Managed Java code builds across different Jenkins servers according to the predefined schedule for continuous integration and consistent delivery.
- Collaborated with development teams to gather requirements for new application builds and deployment processes.

Project Experience 1: Gym-training Web application using AWS, Docker, and Kubernetes

- Developed a gym-training web application leveraging AWS, Docker, and Kubernetes to facilitate self-training routines.
- Provisioned an AWS EC2 instance using Terraform infrastructure as code, deploying Ubuntu as the operating system to serve as the application server.
- Implemented the gym application by developing the frontend using HTML and CSS for layout and styling, and JavaScript for interactive design, ensuring a user-friendly and engaging experience.
- Utilized Git for version control, allowing seamless collaboration and tracking of changes throughout the development process.
- Integrated AWS S3 to store customer-made workouts, enabling users to save and access personalized training routines securely.
- Created a Dockerfile to define the application's environment and dependencies, facilitating consistent deployment across different environments.
- Built a Docker image containing the gym application code and dependencies, ensuring portability and scalability.
- Deployed a Docker container using a custom-built image on a Kubernetes cluster, configuring the cluster for orchestration to ensure high availability, self-healing, and scalability of the application.
- Assigned a service port to the pod's container, allowing users to access the gym application from any local machine connected to the internet, enhancing accessibility and usability.

Project Experience 2: Front-End File Upload to AWS S3

- Developed a user-friendly web application for uploading files directly to an AWS S3 bucket using HTML, CSS, and JavaScript.
- Configured an AWS S3 bucket with appropriate permissions and policies to securely handle file uploads.
- Implemented client-side functionality using the AWS SDK for JavaScript to manage file uploads and interactions with the S3 bucket.
- Created an IAM role with specific S3 permissions to ensure secure and efficient file transfer operations.
- Utilized AWS Cognito for managing user authentication and providing temporary security credentials for accessing S3.
- Employed HTML to structure the front-end webpage, CSS (including Flexbox and Grid) for responsive design and styling, and JavaScript for dynamic user interactions and file handling logic.
- Demonstrated comprehensive knowledge of AWS cloud services including EC2 for scalable computing resources, Lambda for serverless functions, RDS for managed relational databases, and CloudWatch for monitoring and logging.
- Integrated CloudWatch to monitor S3 bucket access and usage, enhancing security and operational insights.
- Leveraged EC2 instances to deploy and test the web application in a controlled environment.
- Utilized AWS Lambda for processing file uploads and triggering additional workflows.
- Managed and maintained an RDS instance for storing application data securely and efficiently.

CERTIFICATIONS

- AWS Certified Solutions Architect
- Microsoft Azure Fundamentals (AZ-900)