Nityanand Madpathi

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SUMMARY

- Accomplished Cloud Engineer with 4 years in Cloud, DevOps, and Data Analytics. Experienced in agile development, building robust applications with Python and AWS services.
- Experienced with AWS services including EC2, S3, Lambda, IAM, RDS, Aurora, Redshift, EBS, API Gateway, CloudFormation, CloudWatch, CloudTrail, SNS, and CodePipeline.
- Strong background in CI/CD using Jenkins, container orchestration with Kubernetes and Docker, and infrastructure as code (IaC) using Terraform.
- Skilled in monitoring and logging solutions such as Prometheus, Grafana, and AWS CloudWatch.
- Adept at implementing and managing cloud-native architectures using AWS services like VPC, RDS, IAM, and CodePipeline, ensuring high availability, scalability, and cost-efficiency through best practices and automation.
- Proficient in data-driven decision-making, with a demonstrated history of providing thorough attention to detail and meeting stakeholder expectations.

SKILLS

- **Programming languages:** Python, Java, C, C++, JavaScript, HTML, CSS, R
- **Databases:** MySQL, MS SQL, Oracle DB
- **Cloud Platforms:** AWS, Microsoft Azure, GCP
- **DevOps Tools:** Terraform, Docker, Kubernetes, Jenkins

WORK EXPERIENCE

GREAT LEARNING – Hyderabad, India   October 2021 – June 2022
Software Engineer

- Created automated backups of ephemeral data-stores to S3 buckets and EBS using AWS CLI, resulting in a 40% reduction in data loss incidents.
- Implemented and managed archival storage solutions using AWS S3, Glacier, and Glacier Vault for efficient and cost-effective long-term data retention, ensuring data integrity and easy retrieval.
- Automated 10+ routine infrastructure provisioning tasks with Terraform, resulting in a 25% reduction in manual effort.
- Managed cross-account migration of EC2 and AWS Redshift cluster snapshots, including copying snapshots to different regions to ensure data redundancy and disaster recovery.
- Implemented CI/CD pipelines using AWS CodePipeline and Terraform, automating deployment processes and decreasing deployment time by around 35%.
- Designed and managed API Gateway configurations, including creating and maintaining RESTful APIs, HTTP endpoints, and integration with backend services.
- Set up comprehensive monitoring, logging, and alerting systems using AWS CloudWatch and CloudTrail, ensuring real-time visibility and reducing security threat response time by 30%.
- Partnered with sales and business teams to automate customer data extraction and analysis, improving data accuracy and increasing actionable insights for sales strategies by 20%.
- Developed and deployed serverless applications using AWS Lambda, enhancing scalability and reducing operational costs.

CAPGEMINI – Bengaluru, India   May 2019 – October 2021
Software Engineer

- Managed and optimized a diverse range of AWS resources, including over 50 EC2 instances, RDS databases, and S3 buckets, ensuring high availability and optimizing cost-efficiency.
- Automated banking jobs and file transfers using Terraform, resulting in a 25% reduction in manual errors.
- Compiled summaries of business processes using SQL, Python, and Tableau, providing critical insights that increased business process efficiency by 20%.
- Collaborated with cross-functional teams to streamline cloud operations and implement DevSecOps practices, integrating security checks into the CI/CD pipeline.
- Developed and enforced AWS Identity and Access Management (IAM) policies to ensure secure and compliant access control. Configured roles, policies, and multi-factor authentication (MFA) for enhanced security.

- Led the migration of on-premises applications to the cloud, resulting in improved performance, scalability, and cost savings.
- Optimized cloud spend through effective resource management and cost monitoring using AWS Cost Explorer and Trusted Advisor.
- Analysed datasets and collaborated with Finance, Accounting, and IT operations teams to gather and prioritize business requirements that increased performance by 25%.
- Created and maintained dashboards using Metabase and Tableau which gave business insights to the stakeholders.

PROJECTS

City Guide – Research Assistant, Wichita State University
- Developed a cloud-integrated mapping system using AWS Lambda, Amazon S3, and Bluetooth beacons with Swift, designed to assist vision and mobility impaired users in navigating indoor spaces.
- Built a UI and mapping system for the campus using OpenStreetMap, Map Libre, and React Native, ensuring seamless data synchronization with AWS services such as API Gateway and RDS for real-time updates and user management.

Netflix Clone on Kubernetes - DevSecOps
- Implemented a full CI/CD pipeline using Jenkins, integrated with SonarQube and Trivy for security analysis, and monitored the system with Prometheus and Grafana. Utilized AWS EC2 for hosting and managed deployments with ArgoCD and Helm.
- Applied cloud automation techniques and DevSecOps methodologies to ensure a secure, scalable, and efficient deployment process.

EDUCATION

Wichita State University, Kansas								**May 2024**
Master of Science in Computer Science, **GPA: 4.0**
CVR College of Engineering, Hyderabad, India						**April 2019**
Bachelor of Engineering in Computer Science, **GPA: 3.62**

CERTIFICATIONS:

AWS Certified Developer, Microsoft Azure az-900, Google Data Analytics, Python, Java Spring Boot.