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TECHNICAL SKILLS

Cloud Technologies	AWS, GCP, Azure
CI/CD Tools	Jenkins
Version Control Tools	Git, GitHub, Azure Repos
Monitoring Tools	Log Analytics, Azure Security Center, SCOM, Site Scope, Cloud watch, AWS Cloud Trail
Operating Systems	Windows, RHEL, CentOS, Ubuntu
Networking	DNS, DHCP, SMTP, HTTP, TCP/IP, Telnet
Scripting Languages	Python, Shell, JavaScript, Bash Scripting
Virtualization Tools	VMware, Hyper V
Ticketing Tools	ServiceNow, JIRA
Containerization and Orchestration Tools	Docker, Kubernetes
Machine Learning	NumPy, Pandas, scikit-learn, matplotlib, seaborn
Web Technologies	HTML, CSS, Bootstrap, PHP, NodeJS, React

PROFESSIONAL EXPERIENCE

Client: Accenture
Role: Associate Cloud Engineer **Nov 2020 – Aug 2022**

Amazon Web Services

- Skilled in AWS Services including **Identity and Access Management (IAM) Policies, Lambda, S3, Glacier, CloudFront, Route53, EC2, ELB, EBS, Auto scaling group, VPC (subnet, IGW, Security Groups, Routing table, NAT, VPC Peering and VPN), RDS, DynamoDB, CloudWatch.**
- Spearheaded collaborative efforts with cross-functional teams to optimize software development processes and streamline cloud infrastructure management, fostering efficiency and cohesion within the organization.
- Proficiently utilized **CloudWatch** and **AWS CloudTrail** for comprehensive monitoring and logging of cloud infrastructure, ensuring real-time visibility into system performance, security, and operational health.
- Implemented three tier architecture that is highly available and scalable using terraform and deployed in EC2 instance using User data Script and AWS services like **VPC, ASG, Route53, CDN, ELB, EC2, S3, NAT**.
- Played a key role in designing and implementing secure network architectures, including **VPCs**, **subnets**, and **security groups**, **NACL** ensuring robust security measures were in place.
- Conducted regular **maintenance** and **troubleshooting** of systems to ensure optimal availability and performance, minimizing downtime and disruptions.
- Demonstrated proficiency in networking protocols such as **DNS, DHCP, SMTP, HTTP, TCP/IP**, and **Telnet**, ensuring seamless connectivity and data transfer within cloud-based systems.
- Implemented and maintained **DNS** configurations, **DHCP services**, and **SMTP** protocols to facilitate reliable communication and resource allocation in cloud networks.
- Spearheaded the seamless **migration** of **on-premises** systems and applications to the cloud, employing best practices to mitigate risks and ensure minimal disruption to operations.
- Designed Stacks using Amazon **CloudFormation** templates to launch AWS Infrastructure and resources.
- Configured AWS **Route53** to ensure **DNS** resolution for AWS resources by **configuring domain name** settings such as **AWS Domain names**, **AWS traffic flow** and **AWS hosted Zones** to respond to DNS queries.
- Implemented **Identity and Access Management (IAM)** policies and roles on AWS, defining granular permissions to control access to resources and enhance security posture.
- Regularly audited and enforced **IAM** policies to ensure adherence to the principle of least privilege, minimizing the risk of unauthorized access and data breaches.
- Regular review and monitor each of **IAM policies** to improve the security of AWS account.
- Orchestrated **VPC peering** connections to establish secure communication channels between virtual private clouds, enhancing interconnectivity and data exchange within the cloud infrastructure.
- Efficiently managed **storage** solutions, **optimizing resource** utilization and data accessibility through **backup**, archival, and retrieval processes, with expertise in **disaster recovery** solutions.
- Implemented version control using **Git**, facilitating efficient collaboration and code management across distributed teams.

- Conducted thorough **TCP/IP** troubleshooting for enhanced cloud network performance. Utilized Telnet Server for efficient remote system access and issue resolution. Deployed and optimized robust **continuous integration (CI)** and **continuous deployment (CD)** pipelines on cloud platforms, harnessing automation to expedite software delivery and bolster productivity.
- Implemented rigorous security compliance measures, adhering to industry standards by performing **VARA** to safeguard sensitive data and ensure regulatory compliance.
- Leveraged **JIRA** and **ServiceNow** for effective incident management, change control, and service request tracking in cloud environments, promoting collaboration and streamlined workflows.
- Proficiently Managed Infrastructure as code using **Terraform** and **Ansible**, ensuring seamless scalability, reliability, and cost-effectiveness.
- Demonstrated ability to collaborate with other teams to achieve complex objectives.
- Configured and monitored **Kubernetes** clusters for efficient container orchestration and deployment of **microservices**, contributing to enhanced scalability and performance.
- Leveraged **Docker** for **containerization**, facilitating the creation of reproducible environments for both development and production purposes.
- Engaged in ongoing professional development, staying abreast of the latest technologies and best practices in DevOps and cloud computing to maintain a cutting-edge skill set.

Microsoft Azure Cloud

- Implemented strategies for managing costs effectively, utilizing **Azure Cost Management** tools to **monitor** and optimize spending within dynamic cloud environments.
- Demonstrated proficiency in Terraform, employing it to automate the deployment of **Azure IaaS virtual machines and scale sets**. Utilized essential **Terraform** features for Infrastructure as Code, including execution plans, resource graphs, and change automation.
- Applied expertise in configuring **User Defined Routes, utilizing custom route tables** for specific scenarios to direct traffic to the Internet via on-premises networks and manage the use of virtual appliances within Azure environments.
- Deployed Azure IaaS ARM virtual machines and PaaS role instances securely within **Virtual Networks (VNets)** and **subnets**.
- Designed **VNets** and subscriptions to adhere to Azure **Network Limits**, ensuring scalability and performance.
- Enabled access to Virtual machines and cloud services within **VNets** through the **Azure External Load Balancer**, facilitating Internet connectivity.
- Implemented **Azure Kubernetes Service (AKS)** to establish managed **Kubernetes clusters** within the Azure environment.

Client: Engage Bay
Role: Cloud Infrastructure Engineer **Apr 2019 – Aug 2020**

Amazon Web Services

- Extensively worked on designing and multi-zones, Regions-based applications, leveraging a suite of AWS servicessuch **as IAM Roles, EC2, VPC, S3, Lambda, CloudFormation**, and more. Ensured **high availability**, **fault tolerance**, and implemented auto-scaling techniques.
- Utilized **Cloud Watch** to monitor resources like **EC2, CPU memory, Amazon RDS DB services, EBS volumes** to set alarms for **notifications** or automated actions to **monitor logs** for better understanding of the operations.
- Expertise in using IAM to create and manage AWS users and groups and use **permissions** to allow and deny their access toAWS resources.
- Configured AWS cloud IaaC using **Terraform** and **CloudFormation** and continuous deployment through **Jenkins** and automatedthe cloud formation using Terraform.
- Worked closely with client application teams to strategize and execute the smooth **migration** of applications from private toAmazon Cloud, overseeing post-migration tasks including **monitoring** and **backup.**

Google Cloud Platform

- Possess proficient knowledge of Google Cloud Platform **(GCP)** services, **including Compute Engine, Instance Groups, Load Balancing, snapshot schedules, and Firewalls.**
- Demonstrated understanding of networking and **web protocols (TCP/IP, HTTP, TLS, REST),** with the ability to analyze traffic for anomalies.
- Configured Google Cloud Interconnect to establish secure, high-speed connections between on-premises data centers and GCP regions.
- Integrated **GCP with Terraform** for Infrastructure as Code (IaaC), automating **resource provisioning and management**, while leveraging GCP Cloud Monitoring and Logging for comprehensive system performance insights.
- Architected and optimized **VPC Service Controls** to strengthen GCP infrastructure against evolving cyber threats, including DDoS attacks and unauthorized intrusion attempts.
- Implemented Jenkins declarative syntax to define CI/CD pipelines as code, enhancing maintainability and reproducibility.
- Streamlined the integration of GCP with Jenkins for continuous integration and delivery, orchestrating automated build and deployment processes using **GCP Pub/Sub** and **Cloud Functions** for event-driven workflows.

Role: Intern **Jan 2018 – Mar 2019**

- Designed highly available, cost effective and faulty tolerant systems using **EC2** instances, **Auto Scaling** and **Elastic Load Balancing.**
- Experience in designing **VPC subnets, route tables, and internet gateways** to establish connectivity between AWS cloud resources.
- Enabled **versioning** and configured **S3 Life cycle policies** to backup.
- Proficient in monitoring and optimizing **CloudFront** performance **metrics** to enhance end-user experience and **reduce latency**.
- Implemented consistent **patch management** procedures to address vulnerabilities across various environments within the Google Cloud Platform.
- Managed and monitored mission-critical systems for optimal performance and high level of **availability**.
- Conducted requirement gathering for **Multi-Cloud** Infrastructure design and operational deployments.
- Continuously monitored and optimized cloud resources to efficiently meet changing demands.
- Ensured compliance with **CIS standards** across **Azure, GCP, and AWS, including OS hardening, patching, and security measures.**
- Prepared Standard Operating Procedures (SOPs), Build guides, and Infrastructure design presentations.
- Experienced in collaborating with third-party infrastructure providers to design and deploy enterprise-scale cloud networks.
- Developed **cloud formation templates** to build immutable infrastructure on AWS.

ACADEMIC PROJECTS

E-commerce Platform

Tech Stack: MongoDB, Express, React, NodeJS

- Leading the development of an e-commerce platform with the MERN stack, achieving around 90% completion of core features, and optimizing UI, item management, and order tracking for seamless shopping experiences.
- Successfully deployed the project on the cloud platform cyclic.sh, leveraging its capabilities for scalability, reliability, and efficient management of resources.

End to End CI/CD Implementation using Jenkins

Tech Stack: Jenkins, Kubernetes, Docker

- Established an end-to-end CI/CD pipeline for Java-based applications, triggering Jenkins pipelines through webhooks.
- Executed processes including building, static code analysis, creation of Docker images, and deployment on Kubernetes.

Cloud Cost Optimization Using CloudWatch and Lambda

Tech Stack: Python, Lambda, CloudWatch, Boto3

- Developed a Lambda function in Python using the Boto3 module for AWS API interaction.
- Utilized CloudWatch events to trigger the Lambda function.
- Implemented functionality within the Lambda function to manage EBS snapshots, including deletion and notification to the designated user group based on specified criteria.

Distributed Systems Integration

Tech Stack: Python

- Spearheaded the integration of XML-RPC communication for seamless file operations and computational tasks.
- Engineered a resilient file synchronization system, harmonizing client and server functionalities for efficient data management.
- Implemented asynchronous RPC calls, optimizing system performance, and enabling concurrent processing of computation requests.

EDUCATION

University Of Texas at Arlington **MS in Computer Science** **August 2022 – May 2024**