**Aditya Vallapudas**

**Full Stack Cloud Developer** 

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**CERTIFICATIONS:**

Zoom Education Certificate **ZTSC11831**

NIIT Certified: Java Enterprise Apps - Level 2 **16APZZZZZ0289**

Microsoft Certified: Azure Fundamentals **7BD0B5-38LFEC**

Microsoft Certified: Azure Developer Associate **54C7B9-B3148R**

Microsoft Certified: DevOps Engineer Expert **6593CD-44EAD5**

**PROFESSIONAL SUMMARY:**

Harnessing over 9+ years of hands-on experience as a Sr. Software Cloud Engineer, I am a seasoned expert in navigating the intricate realms of Cloud infrastructure, Software Development and DevOps methodologies. My journey has been a testament to proficiency across a diverse spectrum of tools and technologies, shaping the landscape of financial cloud solutions.

With an unwavering focus on innovation, Implementing Design principles, Azure Functions with REST APIs and MVC frameworks in creating rich, usable, and functional web applications. Designed and implemented web applications along with third party integrations with Cutting Edge Technologies like Dotnet, Angular, Nodejs, C#, etc. I have sculpted robust CI/CD pipelines utilizing Azure DevOps, Jenkins, Terraform, and Ansible, propelling organizations towards agile, automated deployment lifecycles. My prowess extends to containerization paradigms, orchestrating Docker and Kubernetes environments with finesse, while Helm and Argo CD streamline management and scalability. I am adept at fortifying security postures with Azure Security Center, SonarQube, and Check Marx, ensuring regulatory compliance and resilience against evolving threats.

Powered by a relentless pursuit of excellence, I continuously refine my craft, mastering scripting languages such as Bash, PowerShell, Python, YAML, and JSON to architect elegant, efficient solutions. In the dynamic landscape of cloud technology, I stand ready to leverage my expertise as a catalyst for transformative change and sustainable growth.

**Performed, Executed, and Managed the following tasks, functions, and roles:**

* Proficiency in the use of **AWS** services like **EC2, ECS, S3(Glacier), AppSync, EBS, Cloud Formation, CloudWatch, IAM, SQS, SMS, SNS, Route53, Code Commit, Code Deploy, Code Build, Auto scaling, VPC (Load Balancers).**
* Designed, configured, and deployed **Amazon Web Services (AWS)** for a multitude of applications utilizing the Amazon Web Services focusing on high availability, fault tolerance, and auto-scaling.
* Controlled Multiple **AWS** instances, set the security groups, Elastic Load Balancer and **AMIs**, Auto scaling to design cost-effective, fault-tolerant, and highly available systems
* Used **Jenkins** for Continuous Integration and deployment into **Tomcat Application Server.**
* Responsible for maintaining **GIT**/**SVN** Repositories, and access control strategies.
* Wrote **Shell Scripts**, **and Java Scripts** to automate the package installation, web server, and instance configuration
* Worked with **Terraform** key features such as infrastructure as a code, execution plans, resource graphs, and change automation and extensively used auto scaling launch configuration templates.
* **Implemented Enterprise Integration architecture using Azure offerings like**Azure Service Bus**,** Azure App Service**,** Azure Active Directory**,** Storage**,** Azure SQL server**,** Azure Virtual Machines **and managed** Azure Infrastructure **Azure Web Roles, Worker Roles.**
* Proven Expertise in Automation build or release engineering and software development involving cloud computing
* platforms like Azure and Google Cloud (GCP).
* Worked in designing Terraform and deploying it in Cloud Deployment Manager to spin up resources like Cloud virtual
* networks, compute engines in public and private subnets along with auto scaler in Google Cloud platform
* Setup GCP firewall rules in order to allow or deny traffic to and from the VMs instances based on specific configuration and used GCP cloud CDN (Content Delivery Network) to deliver content from GCP cache locations improving user experience and latency
* Experience in designing architecting and implementing scalable cloud-based web applications using AWS and GCP.
* Configuring, Developing and Monitoring GCP services to increase the delivery speed.
* Strong Knowledge and hands on experience in infrastructure automation using tools like Ansible and Terraform allowing for efficient provisioning and management of cloud resources.
* **Worked on documentation -**Chef**Basics, Initial Setup of**Chef**, Data bags implementation, Coding Standards,** Cookbook **document and testing docs.**
* AWS**server provisioning using**Chef**Recipes.**
* **Production experience in large environments using configuration management tools** Chef**,** Ansible**.**
* **Managed** Chef **cookbooks to automate system operations including** AWS **Cloud management and** Chef **automation**
* **Deployed puppet for configuration management to existing infrastructure**
* **Implemented puppet modules for server housekeeping.**
* Managed Sentry Data Center.
* Integrated Sentry into different applications to improve the overall stability.
* Worked in infrastructure team on Installation, Configuration, Upgrading, Support, and Maintenance of various Linux
* Flavors like Red Hat Linux 8/9, RHEL 5.x/6.x/7, CentOS 5.x/6.x/7, Debian, Ubuntu, and UNIX Flavors like Windows Servers.
* Installed and Deployed Red Hat Enterprise Linux and installation of packages and patches for Linux Boxes.
* Troubleshooting Linux network, security related issues, capturing packets using tools such as Iptables, firewall, TCP wrappers, NMAP.
* Configured and maintained NIS, NFS servers on Linux
* Experience in Package Management using Red Hat RPM/YUM
* Installed and Configured RedHat Linux 6, and Solaris 10 operating systems on a large, distributed environment.
* **Worked on** SQL **and** DynamoDB **databases.**
* Expertise in Migrating SQL databases to Azure SQL.
* Operated on Virtual machines and cloud services in the VNet to the Internet using Azure External Load Balancer.
* Provided high availability for IaaS VMs and PaaS role instances for access from other services in the VNet with Azure Internal Load Balancer
* Created Smart HPA for Kubernetes application and configured it for APC Kubernetes
* **Managed** Kubernetes **charts using** Helm**.**
* Managed Azure resources by configuring Azure Diagnostics and Azure Monitoring.
* Expertise in Cloud Migrations to IAAS Platforms like TFS, and Azure.
* Experienced in branching, merging, and maintaining the versions using tools like Git, TFS, Gitlab, Bitbucket and GitHub.
* **Worked with** Vagrant **for testing** Ansible **plays and deployments.**
* Experienced with DevOps/ Agile operations and tools (resolve merge conflicts, merge code, Build & Release automation, Service, Incident, and Change Management).
* Extensively worked on Jenkins/Hudson and Bamboo for continuous integration and End-to-End automation for all builds and deployments.
* Boosted network system, data availability, and integrity through preventive maintenance and upgrade.
* Collected and Analysed metrics, logs, and events with Athena and Quick Sight
* Develop implementations for cloud and microservices architectures and frameworks
* Regularly develop Frameworks, Pipeline scripts, Cloud CLI scripts as part of migration.
* Experienced with event driven and scheduled functions to trigger various resources.
* Created and used microservices assessment asset for identifying current level of best practices gaps of cloud/microservices practices.
* **Good understanding of OSI Model, and proficient in configuring** TCP/IP, DNS, NFS, SSH, SMTP, **etc.**
* Expertise in Windows System Administration for production, test and development servers.
* Managed System Builds, Server Builds, Installations, Upgrades, Patches, Migration, and Troubleshooting of Server 2008, 2012, and 2012 R2 Servers.
* Handled the automated cloud infrastructure using Terraform which helped in saving time and manual configuration.
* Developed YML and Shell Scripting for creating the build and release pipelines.
* Worked on reconfiguring existing release pipelines based on the user requirement.
* Executed Continuous Integration & Continuous Deployment process using **Azure DevOps** and **Ansible** to reduce the Deployment time.
* Expertise in using build tools like **Maven** and **Gradle** for the building of deployable Artifacts such as war from Source Code.
* Managed environments DEV, QA, STG (UAT), and PROD for various releases and designed instance strategies.
* Implemented Key Management System using Vault.
* Expertise in delivering APIs with .NET, Swift, NodeJS, and TypeScript.
* **Used the** Python**'s modules NumPy, matplotlib, etc.**
* Release management and deployment of large-scale enterprise applications.
* Engaged in setting up JIRA as a defect-tracking system and configuring workflows, customizations, and plugins for the JIRA issue tracker.
* **Integration with**SonarQube**for code coverage,** Selenium **for automatic tests.**
* **Experience in maintaining Atlassian products like** JIRA**,** Confluence **and** Bamboo
* Good knowledge of RDBMS Querying tools such as SQL Server.
* Designed and developed query service using Elastic Search and Kafka.
* Worked on Tomcat, JBOSS, IIS, WebLogic Application servers for deployments.
* Installed and Configured RedHat Linux 6, and Solaris 10 operating systems on a large, distributed environment.
* Worked on HP SiteScope and CA Desk Manager to manage alerts from oncoming traffic/API response times.
* **Used** ServiceNow **tool for managing incidents and change request tickets**
* Worked on xMatters for paging assigned groups.
* **Strong knowledge of Monitoring and log analytics tools like** Nagios**,** SolarWinds**,** Dynatrace**,** Splunk**,** AppDynamics, Prometheus, Elasticsearch**,** Azure Monitor**, and** Grafana**.**
* Worked either independently or as part of a team, collaborating with various other teams for effective deliveries.

**TECHNICAL SKILL:**

**Cloud Platforms:** Microsoft Azure (Web Apps, Storage, SQL Database, Virtual Machines, Service Fabric, Active Directory), Amazon Web Services (EC2, ECS, S3, EBS, ELB, ELK, VPC, IAM, AWSCLI, Route53, SNS, SES, SQS), Google Cloud Platform.

**DevOps Tools:** Azure DevOps, Jenkins, Terraform, Ansible, ARM Templates

**Containerization:** Docker, Kubernetes, Helm, Argo CD

**Monitoring and Logging:** Azure Monitor, Log Analytics, Grafana, Prometheus, Splunk, Nagios

**Security:** Azure Security Center, SonarQube, Check Marx, Multi-Factor Authentication (MFA)

**Internet Technologies:** XML/XSL, C#, .Net, COM/DCOM, ASP, MVC

**Website Development:** HTML, JavaScript, CSS, jQuery, Bootstrap, Angular, React, Vue.js, React Native and Nodejs

**IDE:** Visual Studio Code, Eclipse IDE, Notepad++, Adobe Dreamweaver.

**Database Technologies:** Azure SQL Database, Azure SQL DB Sync, Azure Site Recovery, Mongo DB, SQL Server, MySQL

**Version Control:** Git, GitHub, Bit Bucket

**Scripting and Automation:** Bash, PowerShell, Python, YAML, JSON

**Collaboration Tools:** Atlassian JIRA, Confluence

**Other:** Azure Budgets, Azure Billing APIs, Azure Traffic Manager, Azure Diagnostics, Azure Artifacts, Azure Test Plans, Azure Data Factory, Vagrant, Chef, Vault, Dynatrace, Cloud Shell, Cloud Dataflow, Stack driver, RabbitMQ

**PROFESSIONAL EXPERIENCE:**

**Full Stack Developer**

**Verizon Wireless, Atlanta, GA.**

**Duration – May, 2023 – till Date**

**Responsibilities:**

* Responsible for Scheduler module fully and Designer Module from Backend
* Created Crosstabs and Worksheets results area and Dashboards Controls in Work area
* Responsible for Code review and providing constructive feedback to team members to maintain code quality and standards
* Angular module maintenance and Unit testing.
* Worked on Azure DevOps for building a Continuous Integration (CI) and Continuous Deployment (CD) pipeline.
* Added DevOps capabilities such as Continuous Deployment from Azure DevOps, GitHub, Docker registry, and package management.
* Utilized Azure Kubernetes Services to deploy a managed Kubernetes cluster in Azure and created an AKS cluster in the Azure portal, with the Azure CLI, also used template-driven deployment options such as Resource Manager templates.
* Implemented security best practices in Azure DevOps pipelines, ensuring that all deployments adhere to industry standards and regulatory requirements such as PCI DSS and GDPR.
* Integrated security testing tools such as Azure Security Center and Azure DevOps Security Scanner into CI/CD pipelines, enabling automated security assessments and vulnerability scanning of applications and infrastructure code.
* Utilized Azure Site Recovery to orchestrate the failover and failback processes for on-premise workloads, ensuring seamless migration and recovery of critical services to Azure.
* Designed and implemented disaster recovery (DR) and high availability (HA) solutions for Azure SQL databases, leveraging features such as Geo-Replication and Azure SQL DB Sync to ensure data availability and business continuity in case of failures or disasters.
* Deployed Azure SQL DB with GEO Replication, Azure SQL DB Sync to standby database in another region & failover configuration.
* Expertise in Migrating SQL databases to Azure SQL.
* Implemented security controls and encryption mechanisms to protect sensitive data stored in Azure SQL databases, ensuring compliance with industry regulations and data protection standards.
* Configured Azure Security Center to continuously monitor and assess the security posture of Azure resources, identifying and remediating security vulnerabilities and compliance issues.
* Managed Azure resources by configuring Azure Diagnostics and Azure Monitoring.
* Integrated the Azure pipelines with Azure Artifacts and Azure Test Plans to accelerate the development and deployment lifecycles.
* Implemented cost management practices in Azure environments, optimizing resource usage and reducing operational costs by leveraging features such as Azure Cost Management and Azure Advisor.
* Utilized Azure Budgets and Azure Billing APIs to track and control spending, ensuring that financial clients stay within budget constraints while maximizing ROI.
* Provided training and knowledge transfer sessions to the client's development and operations teams on Azure DevOps best practices, security principles, and cost optimization strategies, empowering them to effectively manage and secure their Azure infrastructure.
* Worked on designing Azure Resource Manager (ARM) templates and created Azure Data Factory pipelines, linked services, triggers, and parameters.
* Terraform and Ansible were used to migrate legacy and monolithic systems to Azure Cloud.
* Have used service manager provider API which uses Terraform to create certificates on the Azure server.
* Worked on Automating, Configuring, and Deploying Instances on Azure environments and in Data Centers and migrating on-premise to Windows Azure using Azure Site Recovery and Azure backups.
* Responsible for web application deployments over cloud services (web and worker roles) on Azure, using VS and PowerShell.
* Created Cache Memory on Windows Azure to improve the performance of data transfer between SQL Azure and WCF services.
* Worked on Event publishing for mass consumption and configured message flows.
* Involved in deploying Kubernetes Cluster on Azure cloud with master/minion architecture and wrote many YAML files to create many services like pods, deployments, auto-scaling, load balancers, health checks, Namespaces, Config Map, etc.

**Azure DevOps Cloud Engineer**

**Humana Inc, KY**

**Duration: Aug 2020 - Apr 2023**

**Responsibilities:**

* Worked with **AWS S3 and IAM services**, created S3 buckets, and configured them with
* permissions, logging, versioning, and tagging and created new **IAM** users and groups, defined roles, policies and identify providers.
* Configuring and setting up **VPC** and launching public and private subnets inside **VPC** and setting Security groups which act as firewall for **EC2** instances.
* Using **Jenkins** **AWS** Code Deploy plugin to deploy to **AWS**.
* Migrated a production infrastructure into **AWS** utilizing Code Deploy, Code Commit, Knowledge of Amazon **ECS** Clusters and able to manage containers in it.
* Configuring **DNS (Route53), ELB,** general networking principles, firewalls, route tables and route propagations.
* Built **AWS** cloud infrastructure like **RDS** through code with additional settings to backup policy.
* Worked with **AWS** **CLI** and **AWS API** to manage resources on AWS for many services such as a **EC2, S3, VPC, CloudWatch, ELB**, Auto-scaling, created **python** script using AWS API Calls to manage all resources deployed on AWS.
* Experience in providing highly available and fault tolerant applications utilising orchestration technologies like **Kubernetes** and **Google Cloud Platform**
* Created database tables that can store and retrieve any amount of data and serve any level of request traffic using **DynamoDB**.
* Configuring and managing **AWS Simple Notification Service** (**SNS**), **Simple Email Service (SES)**and **Simple Queue Service (SQS).**
* Installed and configured foreman with **Puppet**, **Salt Stack** for auto-provisioning the Linux machines in AWS and VMware environments.
* **Linux (Red hat) system administration**, Server hardware maintenance and troubleshooting.
* Installed and Deployed **Red Hat Enterprise Linux** and installation of packages and patches for **Linux Boxes**.
* Configure dynamic and static network settings for IPv4 and filter packets, Review file system management concepts, removable media and configure NFS shares with Autofs.
* Worked on Installation, renewal and configuration of **SSL** **Certificates** for data encryption and client authentication.
* Implement advance disk configuration such as RAID 5 using **Linux** Software **RAID** program.
* Used **Ansible** Playbooks to setup and configure Continuous Delivery Pipeline and **Tomcat** servers.
* Managed **Kubernetes** charts using **Helm**.
* Used Atlassian **JIRA** as issue tracking and ticketing tool.
* Configured **Nagios** to monitor server’s performance on test environment.
* Used **Splunk** to monitoring/metric collection for applications in a cloud-based environment.
* Used **Confluence** for documentation of plans, implementation of new services, issues resolved
* Maintain and administer Datadog Alerting and Monitoring tool, while reporting metrics to the team, solution architect and product manager, which provides insight into the health of the overall infrastructure of the Platform.
* Have been creating Test Environments using **Vagrant** by spinning up **Virtual Machines**
* Experience in creating and writing shell scripts **(Bash), YAML, JSON, Python and PowerShell** for automating tasks
* Developed data warehouse model in **Snowflake** for over 100 datasets
* Managed **Kafka** clusters both on **Windows** and **Linux** environments.
* Document application installations and infrastructure requirements and architecture in **Confluence**.

**Azure DevOps Cloud Engineer**

**Truist, Atlanta, GA**

**Duration: Nov 2017 – Jul 2020**

**Responsibilities:**

* Manage source repositories, perform merges in **GIT**.
* Maintain **GIT** repositories, branching strategies and configure access control to the users.
* Used **Jenkins** for Continuous Integration and deployment into **Tomcat** Application Server.
* Worked on **Shell** **Scripts**, **Python**, and **JavaScript** to automate the package installation, web server, and instance configuration.
* Installation of **Red Hat Enterprise Linux** 6.3 and 5.8, ESXI 5.0 servers through manual and auto build process.
* Installation/Upgrade of packages and check package dependencies on **Linux** **Servers** using **RPM**
* Installing, upgrading and configuring **RedHat** **Linux** 4.x, 5.x, 6.x using Kickstart Servers and Interactive Installation.
* Automate the Linux/Cloud Infrastructure by **Python** & **Bash** **Script**.
* Assist with monthly **Linux** security patching and performance smoke tests
* Maintain **Windows** and **Linux** servers hosted in **Azure Cloud** and on-premises
* Experience in Virtualization of **HPE** Blade Systems for on prem compute
* Designed and implemented processes that support continuous integration and continuous deployment via **Azure DevOps.**
* Create Active Directory, DNS, join domain, Load balancer, SQL server, and **Azure** **CLI** tools and create Infrastructure as Code Pipeline to automate the deployment process.
* Deployed **Azure SQL DB** with GEO Replication, **Azure** **SQL** **DB** Sync to standby database in another region & Fail over configuration.
* Uploaded VHD files into **Azure Storage** Account using AZ Copy.
* Configuring monitoring by using **Azure Monitor**
* Monitoring managing and reporting the backups of the **Azure Virtual Machines** as per the company retention
* Configured users and permissions for **TFS**, **SharePoint** portals, and Source Control Explorer folders.
* Developed automation solutions using **PowerShell** scripting for day-to-day operational tasks.
* Wrote scripts for provision of infrastructure management using **Terraform**.
* Automated AWS glue jobs, triggers, workflows, crawlers with **terraform**.
* Usage of **Grafana** to visualize **Prometheus** metrics
* Develop new and enhance **Dynatrace** plugins to meet specific requirements of app teams.
* Create, maintain and administrating **GitHub** repositories as source code management.
* Involved in setting up **JIRA** as defect tracking system and configured various workflows, customizations and plugins for the **JIRA** bug/issue tracker
* Experienced in upgrading and supporting **Check** **Marx** on **windows** server
* Configured **SonarQube** application to perform continuous inspection of code quality and static analysis of code to detect bugs, code smell and security vulnerabilities.
* Responsible for configuration of **XML** builds and verifying source file into the correct releases and mapping it to the checksum concept.
* Setup ETL for environments and Configuring **RabbitMQ**.
* Configuring **AppDynamics** and created dashboards to monitor and gather required metrics and Expertise in troubleshooting and monitoring applications using **AppDynamics**.
* Installed and upgraded different versions of **Tomcat**/**WebLogic**

**Application Developer / Devops Engineer**

**Client – Walmart, Bentonville, AR**

**Duration – July 2016 – Sept 2017**

The application developed was used for checking the encrypted symbols (a form of encryption standard) with the number of enrolments using the coding/decoding guide in-house to the client. The application uses XML, CSV, or text and encrypts the list of applicants provided into an encrypted field which is used to transfer the information with other third-party users, using this application as a proprietary tool.

**Responsibilities:**

* Responsible for Generating libraries, Creating clients
* Implementing Swagger and Rabbit MQ, Authentication and Authorization
* Module maintenance and Unit testing and PR Approvals.
* Collaborated closely with development teams to integrate version control, continuous integration, and continuous deployment practices into the software development lifecycle.
* Implemented configuration management tools such as Ansible to automate infrastructure provisioning and configuration, reducing deployment time and minimizing configuration drift.
* Established monitoring and alerting mechanisms using tools like Prometheus and Grafana to monitor application performance, resource utilization, and system health.
* Orchestrated containerization using Docker and Kubernetes to enhance scalability, portability, and resource efficiency of the application.
* Conducted regular code reviews and collaborated with developers to optimize code quality, performance, and maintainability.
* Facilitated cross-functional collaboration between development, operations, and QA teams to foster a culture of continuous improvement and innovation.

**System Administrator/ Developer**

**Mother Blood Bank**

**Duration – July 2015 – Oct 2016**

Mother Blood Bank is an online blood bank service that aims in eradicating the scarcity of blood. This website created to maintain the availability of blood with various blood groups and donor’s locations so that the distribution would be easy for hospitals and potential donors

**Responsibilities**

* Managed the databases and storage availability.
* Managing alerts, monitored backend scripts, and setting the scope of application into the tool for monitoring.
* Creating tickets based on the template of the project, Filtering and Managing tickets, Checking the resolution or the status of the ticket, and assigning tickets to the groups in Service Desk Manager.
* Managed on-call services regarding problems in the network, work-station and fixing them.
* Ability to handle System tuning, log maintenance, disk space management, etc.
* Engaged in developing shell scripts for automated installations to extract logs.
* Removing Customers having Good and conserving licenses by removing Good from Customers.
* Grouped sites with the owners and notified the changes in SharePoint upgrades during migrations.
* Documented software usage procedures, and process of installation of operating systems.
* Handling Disaster Recovery plans for the cold backup site.
* Developed shell scripts for running jobs on servers.
* Supported 24x7 for the production issues.
* Deployed code to the servers and handled network issues.
* Backed up data and handled server maintenance tasks.
* Hosting the website and managing the firewall and security aspects of the internet.
* Reporting and documentation are maintained to quickly resolve issues.

**ACADEMIC INFORMATION:**

Bachelors of Computer Applications*- Osmania University, Mar 2015*