



UTSAV CHAUDHARY

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TECHNICAL SKILLS

Operating Systems Windows: Linux distributions (CentOS, Ubuntu, RedHat, Debian) **Programming Languages:** Python, Java, .NET, C++, C#, SQL, JSON, HTML, CSS **Automation and Build Tools:** Ansible, Jenkins, Terraform, Puppet, Chef, ANT, Maven

Version Control Tools: GIT, GitHub, Bitbucket, GitLab

Databases: Oracle, MongoDB, MySQL, CosmosDB, PostgreSQL, Firebase, Cassandra

Scripting: Python, Shell, PowerShell, Ruby, JavaScript, Jinja

Methodologies: Agile, Scrum, Test-driven Approach

Tools: Docker, Kubernetes, Jira, Shell, Bash, Automation, NodeJS, jQuery, Django, Flask, XML, Nginx,

Apache HTTP

SDKs: ReactNative, Unity3D, Android Studio, Arduino

PROFESSIONAL SUMMARY

- ► Migrated on-premises applications to Kubernetes, containerizing them using Docker, and optimized resource allocation and management using Kubernetes orchestration.
- ▶ Deployed and managed containerized applications using Azure Kubernetes Service (AKS), leveraging its scaling and monitoring capabilities to ensure high availability and performance.
- Automated build processes using ANT and Maven for J2EE applications, and MSBuild for .NET applications, ensuring consistent and efficient build procedures across different platforms.
- Integrated unit and integration testing into build pipelines using tools such as JUnit and NUnit, ensuring comprehensive test coverage and early detection of issues.
- ▶ Implemented code quality and vulnerability scanning tools, such as SonarQube and WhiteSource, to enhance code security and maintain high-quality code standards.
- ► Managed source control using Azure Repos, ensuring version control, collaboration, and code integrity across multiple development teams.
- ► Stored and managed build artifacts in Azure Container Registry (ACR) and Azure Artifacts, implementing tagging and versioning to ensure traceability and easy retrieval.
- ► Conducted code and build testing across different environments, including Dev, Test, UAT, and Prod, to ensure reliability and consistency in deployments.
- ► Configured Role-Based Access Control (RBAC) and authentication controls for Azure servers and file systems, ensuring secure access and compliance with security policies.
- ► Implemented load balancers, internal communications, and public/private IP configurations using Azure services such as Azure Load Balancer, Azure Application Gateway, and Azure Virtual Network (VNet).
- ▶ Provisioned infrastructure using Terraform, including creating VNets for seamless communication, ensuring reproducibility and scalability of the infrastructure.
- ► Utilized Bicep and ARM Templates alongside Terraform for application infrastructure deployment, facilitating efficient and repeatable infrastructure provisioning.
- ► Tested containers on Azure Instances during development, creating pipelines for the Dev team to streamline the deployment process and ensure consistency in the development environment.
- ► Containerized applications with Docker, stored images in Azure Container Registry (ACR), performed security scans using tools like Aqua Security, and enforced RBAC policies for secure access to artifacts.
- ► Managed Terraform state backend in Azure Blob Storage, implementing versioning, RBAC, and state locking to ensure consistency and prevent conflicts during infrastructure deployments.
- ► Configured AKS clusters for application deployment, including load balancing, scaling, and health checks, ensuring high availability and performance of deployed applications.
- Implemented Azure Log Analytics and Azure Monitor for infrastructure and application monitoring, analyzing performance metrics, identifying bottlenecks, and optimizing system performance.
- Created performance charts in Azure Monitor, set up alerts for critical metrics, and configured autoscaling and patching for AKS-managed servers to maintain optimal performance and security.

- ▶ Developed CI/CD pipelines using Azure DevOps, integrating build, test, and deployment processes to ensure efficient and secure application delivery.
- ► Collaborated with development teams to streamline DevOps practices, implementing best practices for continuous integration and continuous delivery, and ensuring efficient and secure application delivery.

PROFESSIONAL EXPERIENCE

Client: TransAmerica (Remote, USA) | Azure/Cloud DevOps Engineer RESPONSIBILITIES:

Jan 2023 - Present

- ► Successfully transitioned all **on-premises applications** to **Azure Cloud**, leveraging Azure's scalable infrastructure.
- ► Migrated data to **Azure Storage** solutions, including **Blob Storage** and Azure **SQL Database**, for **scalable** and **secure** data management, ensuring seamless access via Azure services and cloud-hosted applications.
- Developed CI/CD Pipelines for Hosting internal applications on Azure DevOps while maintaining critical data on-premises, leveraging hybrid connectivity solutions such as Azure VPN and ExpressRoute to securely access on-premises data through Azure services.
- ► Implemented and managed Azure resources spanning multiple providers including **Compute**, **Network**, and **Application Gateway**, utilizing **Terraform** and **Bicep Templates**, also had experience with **ARM** templates. Established and sustained Dev, Test, UAT, and Prod environments through infrastructure as code methodologies, employing **Terraform scripting** and **Bicep Templates**.
- Involved in writing **Ansible playbooks** to push out **new/confirm** configuration of the deployed **infrastructure**. Defined tasks to Ansible modules for roles and playbooks and **run** it on **DevOps Pipeline** for all the **hosts** to be updated.
- ▶ Developed and maintained custom Python, Bash, Shell, and PowerShell scripts to automate CI/CD pipelines, enabling seamless integration and deployment processes across Azure DevOps, enhancing build, test, and release efficiency. Using CRON Jobs to Schedule jobs on the master node.
- ► Utilized **Python** and **Shell** scripting to **automate** infrastructure **provisioning** and **configuration** with **Terraform** and **Ansible**, and orchestrated containerized applications using **Docker** and **Kubernetes**, ensuring consistent, scalable, and reliable **environments**.
- Utilized **Docker** to **containerize applications**, enabling **portability** and **scalability** across different environments. Configured Docker images to encapsulate application code, dependencies, and configurations, and stored them in **Azure Container Registry**, facilitating **version control** and **artifact management**.
- ► Integrated Docker images into CI/CD pipelines in Azure DevOps, tagging artifacts for traceability and seamless deployment to Azure Kubernetes Service AKS, optimizing the software delivery lifecycle SDLC.
- Utilized Helm charts to efficiently deploy and manage Kubernetes applications on Azure Kubernetes Service (AKS), leveraging Docker to containerize our applications and Azure Container Registry (ACR) to securely store and manage Docker images.
- ► Integrated **SonarQube**, **Snyk**, and **Checkmarx** into the CI/CD **pipeline** to continuously monitor and improve code **quality and security**, reducing **vulnerabilities** and ensuring compliance.
- Assisted the migration from JIRA & Kanban Boards to Azure Boards to view stories, tasks, bugs, and features. Managed the concurrent usage of both systems during the transition phase, ensuring minimal disruption to ongoing projects and workflows.
- ► Integrated unit tests, integration tests, and UI tests with Selenium into the CI/CD pipelines using Azure DevOps, ensuring comprehensive testing coverage and automated Report Generation.
- ► Involved in **Designing, Configuring and Deploying** Azure Virtual Networks **VNets**, Subnets, Service and Private Endpoints, DNS Servers, Address space, Security Policies and VNet Peering's using **Terraform**.
- ► Created and managed **Azure AD tenants**, **manage users and groups** in Azure AD, and configure application **integration** with Azure **Default Directory**. Configured Multi-Factor authentication **MFA** and aligned single sign-on **SSO**.
- Assisted in deploying Azure **Monitor** and Azure **Log Analytics** for real-time **monitoring and logging** of cloud resources, enhancing visibility and operational efficiency.
- ► Implemented Azure Key Vault to securely manage secrets, credentials, and configurations, ensuring data security and compliance. Integrated access to Key Vault and utilized stored credentials within the pipeline for enhanced security and seamless deployment processes.
- ► Established a **branching** strategy using **Git** and **Azure Repos**, creating separate branches for Dev, Test, UAT, and Production **environments**.
- ► Set up manual validation steps in the CI/CD pipeline for critical deployments, ensuring thorough review and approval before production release.

- ► Integrated **security tools** like **OWASP ZAP and Veracode** into the CI/CD pipeline for continuous security scanning and vulnerability assessment.
- ► Created and maintained detailed documentation of migration processes, CI/CD pipeline configurations, and infrastructure setups to facilitate knowledge transfer and future maintenance.
- ► Followed **Agile** methodologies to measure the overall workflow of projects and attended daily stand-up meetings.

Softline Solutions PVT. LTD. (Bangalore, IN) | Cloud DevOps Engineer RESPONSIBILITIES:

Jul 2020 - Jul 2022

- ► Designed cloud native solutions with **Azure PAAS** services leveraging **Azure storage**, **Azure SQL**. Designed **event-driven** architectures using serverless **functions**, orchestrated and managed through **GitHub Actions**.
- ▶ Designed and implemented CI/CD pipelines using GitHub Actions, integrating code testing with tools such as pytest and unittest for Python, and security scanning with CodeQL.
- ► Orchestrated **infrastructure deployment** using both **Terraform** and **Bicep templates**, ensuring infrastructure as code principles and efficient **resource management**.
- ► Used **Staged Deployment** strategy, initially deploying **applications** across **two** separate **pools of servers** for **resilience** and **testing** purposes. Incorporated **Azure Monitor** for real-time **monitoring and diagnostics**, along with **Prometheus** and **Grafana** for advanced **analytics and visualization**.
- ► Assisted in Network Traffic splitting mechanism using Azure Traffic Manager and Azure Application Gateway, directing users to specific application versions based on predefined rules.
- ► Managed Application Deployment to different server pools based on Manual Validation and Monitoring Insights, utilizing Azure DevOps for change management.
- ► Created and configured **HTTP Triggers** in Azure Functions enabling **Application Insights** for monitoring, debugging, and performing **load testing** on the applications using **Python API** for uploading all the agent logs into **Blob Storage**, with automation through GitHub Actions.
- ► Hosted private Git repositories for source code control. Developed build workflows, additionally utilizing **GitHub Actions** to **enhance automation** capabilities, **enabling parallel** workflows, and **integrating seamlessly** with repositories.
- ► Containerized applications using Docker, storing images in Azure Container Registry (ACR), and deployed them on Azure Kubernetes Service (AKS) for container orchestration.
- ► Configured AKS with Horizontal Pod Autoscaler and Kubernetes Cluster Autoscaler for automated load balancing and scalability, ensuring optimal performance under varying loads.
- ► To ensure security, we implemented **Azure Key Vault** to manage secrets and credentials, enforced network policies, and enabled role-based access control (RBAC) within our Kubernetes environment.
- ► Created and managed organization's infrastructure within Azure using Terraform and Ansible, automated deployment processes with GitHub Actions.
- ► Optimized hosting costs by leveraging **Azure Reserved Instances** and Azure Hybrid Benefit, maximizing utilization of Azure services while minimizing expenses.
- ► Wrote **Ansible playbooks**, Roles and followed **best practices** to utilize **Ansible Handlers** with multiple tasks to **trigger** various **handlers** and to decouple handlers from their names.
- Worked on a **Proof of Concept** (POC) initiative focused on **modernizing CI/CD** processes, leveraging **GitHub Actions Pipelines** and **Tekton** to streamline software **delivery workflows**. Implemented and fine-tuned automation pipelines, integrating advanced features to enhance efficiency, scalability, and reliability across the development lifecycle.
- ► Involve in daily **stand-up** meetings, sprint **backlog** and sprint **retrospective** for **Agile Scrum** Process.

Compendious Medialabs Pvt. Ltd. (Mumbai, IN) | Ansible/Cloud Engineer (Intern) RESPONSIBILITIES:

Dec 2019 - June 2020

- ► Developed custom **Ansible Modules** in **Python** to enhance functionality and automate tasks within the infrastructure.
- ► Worked on in-line scripts automation for **Ansible** and **Terraform**, using Bash, Python, Shell, and Powershell.
- ▶ **Developed** and maintained **scripts** to **automate** repetitive **tasks**, **enhancing productivity** and efficiency across the team using **Python**, **Bash**, **and PowerShell**.
- ► Used **Ansible** to automate **Configuration Management** tasks, ensuring **consistency**, **repeatability** and avoiding **configuration drift** across environments.
- ► Collaborated with fellow DevOps engineers to **support** the **development** and **maintenance** of CI/CD **pipelines**.
- Tested **Jenkins** for CI and automated scheduled data **scraping** and **uploading** to databases, ensuring **timely** and **accurate data** updates.
- Assisted in the deployment and monitoring of automated solutions, **ensuring smooth** operation and **quick issue** resolution.

- ► Knowledge and hands-on experience with popular DevOps tools such as Docker, Kubernetes, Jenkins, Ansible, and Terraform.
- ► Experience with Infrastructure as Code (IaC) tools, particularly **Azure Resource Manager** (ARM) templates and Terraform and Ansible for automating configuration management and deployment tasks.
- ► Strong **communication skills** for effective interaction with various stakeholders, including developers, operations teams, and management.
- Gained experience in **critical thinking** and **problem-solving** abilities, essential for **troubleshooting** issues and **optimizing** processes.

Compendious Medialabs Pvt. Ltd. (Mumbai, IN) | Python Engineer (Intern) RESPONSIBILITIES: May

May 2019 - Dec 2019

- ▶ Developed **Python scripts** to automate tasks using APIs, including creation and utilization, and implemented **web scraping** and **testing** with **Selenium**.
- ▶ Utilized **Python libraries** such as **requests** for efficient handling of HTTP requests for **data collection**.
- ► Used libraries like **Pandas, NumPy** for **sorting and filtering** data and used **Databases** for **storing, and retrieving** data.
- Leveraged **Redis** for caching and optimizing data retrieval processes, enhancing system performance and efficiency.
- ► Integrated **RSS** feed handling into Python scripts, enabling streamlined **data processing** and utilization for various applications.
- ► Utilized **Azure services** for **virtual machines, databases**, and other **infrastructure** requirements, ensuring scalable and reliable automation solutions.
- ► Implemented end-to-end automation workflows, ensuring seamless execution of tasks from data acquisition to storage and processing.
- ► Contributed to the development of **internal tools** to streamline **repetitive tasks**, **increasing** team **productivity** and **efficiency**.

EDUCATION

Binghamton University (SUNY)	Aug 2022 - Dec 2023
Master of Science in Computer Science	GPA: 3.44/4
Universal College of Engineering	Jul 2016 - Jun 2020
Bachelor's in Computer Engineering	GPA: 8.09/10