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

▸ Experienced DevOps / Cloud Engineer with 4+ years of hands-on experience specializing in **Azure**.
▸ Skilled in deploying resources in **Azure** cloud interface which include IaaS models, PaaS models, configure role-based access, provision application resources, tune existing resources, work with **Azure DevOps**, and deploy resources using **Terraform, and ARM** templates.
▸ Worked on migrating on-prem infrastructure and application to Azure and adopt CI/CD using Azure DevOps and GitHub Actions . Worked with **Microsoft Identity Manager Management** authentication and authorization including **Azure Default Directory (AD)**. Set up **Azure devops CI/CD** release and validation pipelines.
▸ Experience with **Azure Resource Manager (ARM)** templates and **Terraform** scripts for **creating** Resource Groups, Virtual Networks, Subnets, Virtual Machines, Blob Storage, Azure-CLI, Network Design, Azure Automation, Azure Active Directory, Azure AD Connect, Application Gateway, Key vaults, Site Recovery, Azure Boards, Azure Repos, Azure Pipelines, Azure Artifacts and Azure Test Plan resources.
▸ Proficient in planning, collaborating, and tracking work/assignments using **Azure Boards** agile productivity tools.
▸ Worked on using **CI/CD Azure Pipelines and GitHub Actions** to build and test code projects which were tested in the Test . Focused on **triggers** that automatically invokes build pipelines for **Continuous Integration** of source code changes and release pipelines for **Continuous Deployment**.
▸ Expertise in defining **Azure Pipelines and GitHub Actions** workflows for **provisioning** application resources, managing secrets and environment variables securely, and orchestrating complex deployment pipelines. Used **Azure Key Vault, HashiCorp Vault**
▸ Skilled in creating and deploying **artifacts** for **NuGet packages, Docker images, applications, Maven, and npm**. Experienced in **storing** these artifacts using **Azure Artifacts, GitHub Packages, and Docker Hub**.
▸ Experienced in building testing pipeline and integrating **Static Code Analysis, Load Testing, Automated Testing and Compatibility Testing**
▸ Worked on **monitoring** and **optimizing** Azure Pipelines and GitHub Actions **workflows** for performance, resource utilization, and cost efficiency, utilizing built-in metrics and logging feature with **Marketplace integrations**.
▸ Proficient in invoking **HTTP trigger** functions with HTTP request and build serverless APIs. Worked with **Postman API** testing tool to call HTTP triggers and performed load testing on the applications using Azure DevOps Services.
▸ Skilled in integrating **Azure DevOps** with **Docker containers** using Azure DevOps pipelines to orchestrate microservices builds and deployments to Azure Kubernetes Service (AKS). Implemented configuration automation and server virtualization using Docker in Test and production environments within Azure **DevOps pipelines**.
▸ Proficient in implementing and maintaining **Kubernetes** (k8s) Clusters for running **microservices** and pushed them into **production** with **Kubernetes, Docker, AKS, Azure and Artifacts**.

▸ Developed automated **Kubernetes clusters** using **Ansible playbooks**, and utilized **Calico** to provide secure **network** connectivity for **Docker containers**

▸ Streamlined data collection processes by integrating **Python** scripts with **SQL database** for efficient data storage and retrieval. Utilized **pandas and NumPy** for data cleaning and transformation, and employed **Cron Jobs** to automate regular **scraping tasks**, ensuring timely and accurate data updates.

▸ Hands-on experience with **Ansible YAML scripts** that automates cloud provisioning, configuration management, intra-service orchestration and application deployment.

▸ Designed and implemented **web scraper**s using **Selenium** to extract and process large volumes of data from various **dynamic** and **static websites**. Ensured robustness by incorporating **error handling, retries, and logging mechanisms** to manage network issues and **site structure changes** effectively.

▸ Expert with **HashiCorp Terraform** automation for provisioning and managing various cloud infrastructures. Deployed **Terraform** scripts using **Azure Build and Release** pipelines.

▸ Proficient in leveraging reusable **Terraform templates/modules** for provisioning and managing Azure infrastructure as code (IaC) to establish **Dev, Test, UAT, and production** environments through **configuration** files. Utilized **Azure Storage** to store **Terraform state** files, ensuring comprehensive tracking of all environment changes.

▸ Experienced with version control systems such as **GIT, Subversion, Azure Repos**. Utilized GitBash tool to clone the private and public repositories. Skilled in building project branches, merge and release them into various environments.

▸ Experience in scripting languages like **Python, Ruby, Perl, Shell, Bash** and familiar with **storage, Networking, PowerShell** commands. Experienced in creating automated **PowerShell** Scripts for **web-app deployment**.

▸ Experience in working with **Agile** methodologies and **Scrum** practices. Handled daily stand-up calls to measure the team performance and manage the work.

PROFESSIONAL EXPERIENCE

Client: TransAmerica (Remote, USA) | 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.

▸ 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) | Azure/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 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**