



## **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, Azure Repos

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

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

Methodologies: Agile, Scrum, Test-driven Approach

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

SDKs: ReactNative, Unitv3D, Android Studio, Arduino

### **PROFESSIONAL SUMMARY:**

- > Experienced DevOps / Cloud Engineer with 5+ years of hands-on experience specializing in Azure
- · Worked on migrating on-prem infrastructure and application to Azure and adopt CI/CD using Azure DevOps and GitHub Actions . Set up **Azure devops CI/CD** release and validation pipelines
- Experience with building Azure DevOps CI/CD Workflows and Github Action Workflows to automate Creation and Configuration of Azure Resources using Bicep templates, Terraform scripts and Azure Resource Manager (ARM) in all environments for creating Resource Groups, Virtual Networks, Subnets, Virtual Machines, Blob Storage, Azure Active Directory, Azure AD Connect, Application Gateway and Azure Boards, Azure Test Plan resources
- Focused on triggers that automatically invokes build pipelines for Continuous Integration of source code changes and release pipelines for Continuous Deployment
- 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
- Designed and implemented web scrapers 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
- > 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
- Proficient in using PowerShell, Bash for automation scripting, creating efficient and reliable scripts to automate various tasks and **streamline** workflows in both **development** and **operational** environments.
- Expertise in defining Azure Pipelines and GitHub Actions workflows for provisioning application resources, managing secrets and environment variables securely, and orchestrating complex deployment pipelines. Utilized Azure Key Vault, HashiCorp Vault, Terraform, Ansible, Docker, and Kubernetes for seamless infrastructure management and deployment automation
- 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. Streamline Build Process to ensure robust version control and traceability across diverse development environments
- 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 pipelines to orchestrate **microservices** builds and deployments to **Azure Kubernetes Service** (AKS)
- 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 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) | Azure/Python 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.
- Developed **RESTful** web services using **Django** and **Flask** frameworks, connecting seamlessly with **Azure SQL Database** for efficient data transfer and management.
- Assisted in creating and managing secure **Azure network architectures**, including virtual networks (VNets) and subnets, applying RBAC and network security groups (**NSGs**) to **control traffic and access**. Developed and implemented **pipelines** to **automate** the application of these **configurations** on **newly created infrastructure**
- Implemented Azure **DevOps** pipelines to automate the build, test, and deployment processes of **Django** and **Flask** applications, integrating Docker containers for consistent deployment environments.
- 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**.
- Monitored and audited Azure environments for compliance with security policies and RBAC configurations, using tools like Azure Security Center and Azure Policy.
- 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**.+
- 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** 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** in different **Environments**.
- 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)
Master of Science in Computer Science

Universal College of Engineering Bachelor's in Computer Engineering Aug 2022 - Dec 2023 GPA: 3.44/4

> Jul 2016 - Jun 2020 GPA: 8.09/10