



## **UTSAV CHAUDHARY**

utsav28.devops@gmail.com

+1 (281)-9680-345

linkedin.com/in/utsavmaan28/

### **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, Unity3D, Android Studio, Arduino

#### **PROFESSIONAL SUMMARY:**

- > Experienced DevOps / Cloud Engineer with 4+ 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 . 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 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
- Implemented and managed Citrix Virtual Apps and Desktops environments, utilizing Ansible to automate the deployment and configuration, enhancing user experience and system reliability.
- · Automated XenServer patching and updates with Ansible, ensuring all hosts are up-to-date with the latest security patches and software versions without downtime.
- > Expertise with a wide range of tools including Ansible, Jenkins, Terraform, Puppet, Chef, ANT, Maven, and specific experience in transitioning from custom scripts to modern **Ansible playbooks** for **Citrix environments**.
- Focused on triggers that automatically invokes build pipelines for Continuous Integration of source code changes and release pipelines for Continuous Deployment
- · Working on establishing XenServer build automation using Ansible, enhancing the automation of Citrix cloud control panel 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)

- 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
- 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
- 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:**

### <u>Client: TransAmerica (Remote, USA) | Azure/Cloud DevOps Engineer</u> RESPONSIBILITIES

Jan 2023 - Present

- 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.
- Managed and automated Citrix environments, including Citrix Virtual Apps and Desktops, using Ansible for configuration management and deployment, ensuring robust and scalable infrastructure.
- 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**.
- Developed **Ansible playbooks** to integrate **monitoring** and **reporting** tools with Citrix **environments**, providing real-time **insights and automated alerts** for proactive **management**.
- Improved the Citrix cloud control panel by converting old custom scripts into modern, robust Ansible playbooks, enhancing automation and reducing manual intervention.
- 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**.
- Developed automated Kubernetes clusters using Ansible playbooks and utilized Calico to provide secure network connectivity for Docker containers.
- 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.

# <u>Softline Solutions PVT. LTD. (Bangalore, IN) |Cloud DevOps Engineer</u> 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)
Master of Science in Computer Science

Aug 2022 - Dec 2023 GPA: 3.44/4

**Universal College of Engineering**Bachelor's in Computer Engineering

Jul 2016 - Jun 2020 GPA: 8.09/10