



UTSAV CHAUDHARY

utsav28.devops@gmail.com

+1 (281)-9680-345

[linkedin.com/in/utsavmaan28/](https://www.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, TomCat

SDKs : ReactNative, Unity3D, Android Studio, Arduino

PROFESSIONAL SUMMARY :

- Experienced DevOps / Cloud Engineer with **6 years** of hands-on experience specializing in **Azure**. Have relevant experience with Automation, Python Scripting, and Machine Learning.
- Created and managed Azure ML workspaces to organize and streamline machine learning projects, experiments, and datasets
- 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 invoke build pipelines for **Continuous Integration** of source code changes and release pipelines for **Continuous Deployment**
- Developed and orchestrated end-to-end **ML pipelines**, automating data **preprocessing, model training, evaluation, and deployment** processes.
- Proficient in using **PowerShell, and 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)**
- 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:

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

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.
- › Assisted **ML team** in streamlining their **workloads** on Azure **Cloud**, optimizing computing resources and ensuring seamless integration with **Azure services**.
- › Leveraged **Docker** to containerize **ML models** and **applications**, deployed and managed Kubernetes clusters (**AKS**) to orchestrate **containerized ML applications**, ensuring high availability and scalability.
- › 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**.
- › 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**
- › Involved in implementing Azure Role-Based Access Control (**RBAC**) to manage and restrict **access to resources**, ensuring that users and applications had the minimum necessary permissions.
- › 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**. Apache
- › **Monitored** and audited Azure environments for compliance with **security policies** and **RBAC** configurations, using tools like Azure Security Center and Azure Policy. Nginx
- › 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.
- › 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 Tomcat 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 (i)

RESPONSIBILITIES

June 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 2018 - May 2019

- › Worked on a project that **translates** and augments Sign Language using **Machine Learning** and **Augmented Reality**.
- › Employed **MobileNet V2** as a transfer learning **model**, and it was hyper tuned to meet the needs.
- › Designed the model using the algorithms that **TensorFlow Lite** showed promising results with **28mAP** and is used by developers to integrate with Augmented Reality.
- › Developed an android application for preschoolers with cognitive challenges, hearing and speaking aid
- › Implemented Augmented Reality along with **Deep Learning models** i.e., **Convolutional Neural Network CNN** with 95% accuracy & **Image Processing** using TensorFlow & Keras, integrated Google Vision API for Handwriting Analysis, assisted with Sign Language.
- › Awarded as Innovative Idea during the internal presentation in 2020.
- › Authored and published a paper in the international journal IOSRJEN in May 2021, V11 ~ I5 ~ S1, E-ISSN: 2250-3021

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 2015 - Jun 2019

GPA: 8.09/10
