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, AWS CodeCommit
Databases :	Oracle, MongoDB, MySQL, CosmosDB, PostgreSQL, Firebase, Cassandra
Scripting :	Python, Shell, PowerShell, Ruby, JavaScript, Jinja, Groovy, YAML
Methodologies :	Agile, Scrum, Test-driven Approach
Tools :	Azure, AWS, 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 **DevOps** experience specializing in **Azure** and **AWS**.

‣ Developed comprehensive **CI/CD pipelines** on **Azure DevOps** integrating **Terraform**, **Bicep** Templates, and **ARM** templates to manage Azure resources securely via **Azure VPN** and **ExpressRoute**, ensuring seamless deployment across multiple environments.

‣ Focused on **triggers** that automatically invoke build pipelines for **Continuous Integration** of source code changes and release pipelines for Continuous Deployment

‣ Utilized **Docker** for containerizing applications and managing Docker images through **Azure Container Registry** (ACR) and **Amazon Elastic Container Registry** (ECR), deployed on **Azure AKS** and **AWS EKS** with Horizontal Pod Autoscaler and **Kubernetes Cluster** Autoscaler for automated scaling and load balancing.

‣ Assisted in migrating monolithic applications to a microservices architecture using Docker and Kubernetes on **Azure Kubernetes Service** (AKS), leveraging **Azure Container Registry** (ACR) for artifact management and ensuring scalability and resilience.

‣ Orchestrated CI/CD pipelines using **Jenkins** for **Azure** and **AWS** environments, integrating security tools like **SonarQube**, **Snyk**, and **OWASP ZAP** for continuous monitoring and compliance, ensuring efficient software delivery and quality assurance.

‣ 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**.

‣ Implemented infrastructure deployment and management across **AWS** using **Terraform** and AWS **CloudFormation**, optimizing costs with AWS **Reserved Instances** and Savings Plans, and integrating AWS services like **Route 53** and **Application Load Balancer** for resilient application deployment.

‣ Proficient in using **Python, Ruby, Perl, Shell, Bash**, and **PowerShell**, for automation scripting, creating efficient and reliable scripts to automate various tasks and streamline workflows in development and operational environments.

‣ Implemented network policies in **Azure Kubernetes Service** (AKS) and **Amazon EKS** to control traffic flow and enforce security rules between **pods** and **external** services, ensuring secure communication and compliance with organizational security policies.

‣ Experienced in building **testing pipelines** and integrating **Static Code Analysis**, **Load** Testing**, Automated Testing** and **Compatibility** Testing

‣ Utilized Kubernetes-native tools and RBAC to manage access control and enhance network segmentation within the cluster environment.

‣ 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

‣ Managed project workflows effectively using **Agile** methodologies in Azure DevOps, including sprint planning, backlog management, and retrospective meetings, ensuring alignment with project goals and timelines.

‣ Implemented **Azure Monitor**, Azure **Log Analytics**, Amazon **CloudWatch**, **Prometheus**, and **Grafana** for real-time monitoring, diagnostics, and advanced analytics across Azure and AWS environments, ensuring operational efficiency and proactive issue resolution.
‣ Developed **Azure DevOps** and **Jenkins** workflows for automated **report generation** using **Prometheus** and **Grafana**, scheduling reports to be sent automatically via **SMTP** for continuous monitoring and transparency.
‣ Experienced with version control systems such as **GIT**, **Subversion**, **Azure Repos**, and **AWS CodeCommit**. Skilled in building project branches, merge and release them into various environments

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PROFESSIONAL EXPERIENCE:

Client: TransAmerica (Remote, USA) | Azure/Cloud DevOps Engineer
RESPONSIBILITIES Jan 2023 - Present
‣ Migrated legacy monolithic J2EE and .NET applications to **Azure Cloud** using microservices architecture, deploying them on **Kubernetes** (K8s) for improved scalability, resilience, and manageability. Created **pipelines** to **containerize** applications and used Kubernetes manifests and YAML files for efficient deployment and management on Azure Kubernetes Service (**AKS**).
‣ Developed **CICD Pipelines** to implement and manage Azure resources spanning multiple providers including Compute, Network, and Application Gateway, utilizing **Terraform** and **Bicep Templates**, also had experience with **ARM** templates. They established and sustained Dev, Test, UAT, and Prod environments through infrastructure as code methodologies, employing Terraform scripting and Bicep Templates.
‣ 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.
‣ Assisted in deploying and managing secure Azure network architectures, including virtual networks (**VNets**) and subnets, applying **RBAC** and network security groups (**NSGs**) to control traffic and access and developed and **implemented pipelines** to automate the application of these **configurations on newly created infrastructure**.
‣ Assisted in writing Ansible playbooks to push out **new/confirm** the configuration of the deployed infrastructure. Defined tasks to Ansible modules for roles and playbooks and ran them on the **DevOps Pipeline** for all the hosts to be updated.
‣ Created testing **environments** for the development team using **Azure Container Instances**, setting up CI/CD pipelines in a **Dev** environment to allow developers to test their code and integrations seamlessly within the pipeline
‣ 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.
‣ 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.
‣ 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 K8s manifests 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 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**).
‣ 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.
‣ Monitored and audited Azure environments for compliance with security policies and RBAC configurations, using tools like Azure Security Center and Azure Policy.
‣ Assisted in deploying **Azure Monitor** and **Azure Log Analytics** for real-time monitoring and logging of cloud resources, enhancing visibility and operational efficiency.
‣ 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 **AWS** services, leveraging Amazon **S3** and Amazon **RDS**. Designed event-driven architectures using serverless functions, orchestrated and managed through **Jenkins**.
‣ Designed and implemented CI/CD pipelines using **Jenkins**, integrating **code testing** with tools such as **pytest** and **unit** test for **Python**, and security scanning with **CodeQL**.
‣ Orchestrated infrastructure **deployment** using both **Terraform** and AWS **CloudFormation** 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 Amazon **CloudWatch**, **Prometheus**, and **Grafana** for real-time monitoring, diagnostics, advanced analytics, and visualization.
‣ Assisted in implementing a network traffic splitting mechanism using **AWS Route 53** and **AWS Application Load Balancer** (ALB), 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 **Jenkins** for change management in different environments.
‣ Created and configured **HTTP** triggers in **AWS Lambda**, enabling Prometheus and Grafana for monitoring, debugging, and performing load testing on the applications. Used **Python API** for uploading all the agent logs into **Amazon S3**, with automation through **Jenkins**.
‣ Hosted private Git repositories for source code control. Developed **build workflows**, additionally utilizing **Jenkins** to enhance automation capabilities, enabling **parallel workflows**, and integrating seamlessly with repositories.
‣ Containerized applications using **Docker**, stored images in **Amazon Elastic Container Registry** (ECR) and deployed them on **Amazon Elastic Kubernetes Service** (EKS) for container **orchestration**.
‣ Configured EKS with **Horizontal Pod** Autoscaler and **Kubernetes Cluster Autoscaler** for automated load balancing and scalability, ensuring optimal performance under varying loads.
‣ Implemented **AWS Secrets Manager** to manage secrets and credentials, enforced network policies, and enabled role-based access control (**RBAC**) within the Kubernetes environment to ensure security.
‣ Created and managed the organization's infrastructure within AWS using **Terraform** and **Ansible**, automating deployment processes with **Jenkins**.
‣ Assisted in Ansible **playbooks** and roles, following best practices to utilize Ansible handlers with multiple tasks to **trigger various handlers** and to decouple handlers from their names.
‣ Involved in daily **stand-up** meetings, sprint **backlog**, and sprint **retrospective** for the Agile Scrum process, using **Jira** for project tracking and management.

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 script 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, and 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**
