# AMARNATH JAMALE

Platform Engineer (Azure, DevOps, Unix)



+47 455 28 455 +91 7038 990 660



amar@jamale.org



Økernveien 5B, 0653 Oslo



<u>i</u>n/amarnathjamale/



github.com/amarnathjamale



amar.jamale.org (Portfolio)

#### **OBJECTIVE**

An adept computer enthusiast with professional experience of 5 years as Azure, DevOps & Unix Engineer. Proficient in a spectrum of technologies encompassing Core Infrastructures domains such as Cloud, DevOps, Unix, and Automation. Demonstrated expertise in Agile methodologies, complemented by robust analytical and problem-solving abilities, impeccable written and verbal communication skills.

#### PROFESSIONAL EXPERIENCE

## Tata Consultancy Services Limited – DNB Bank ASA, February 2019 – Present

Azure DevOps Engineer, May 2021 - Present

- Implemented Infrastructure as Code (IaC) using tools like Terraform, Bicep and ARM templates to automate the provisioning and configuration of Azure resources.
- Streamlined the creation of Azure DevOps Repositories, Azure AD access groups, and repository policies through automation, utilizing the Azure DevOps API to enhance the management of these components.
- Collaborated seamlessly with cross-functional teams to conceptualize, design, and implement Azure DevOps solutions, ensuring alignment with business objectives and industry best practices.
- Managed Azure DevOps pipelines, overseeing CI/CD automation for various projects within the organization to enhance overall project efficiency.
- Developed and tested disaster recovery plans, ensuring quick recovery with minimal downtime in unforeseen events, thereby bolstering system resilience.
- Orchestrated containerized applications using Azure Kubernetes Services, streamlining deployment processes and increasing scalability for microservices architecture.
- Utilized DevOps pipelines integrated with Ansible Automation Platform to deploy pacemaker clusters on Azure, facilitating efficient cluster management.
- Worked closely with development teams to streamline code deployment processes, implementing effective test plans and artifacts management for quicker and more reliable releases.
- Monitored and optimized Azure cloud infrastructure for performance, scalability, and cost-effectiveness using Azure Monitor and Azure Log Analytics/Operation Management Suite Agents resulting in decreased MTTR.
- Conducted regular security assessments and implemented security best practices using Azure VM image builder to ensure the confidentiality and integrity of data and applications.
- Migrated OnPrem workloads to Azure with standardized pipelines developed by Azure migrate agent using lift and shift method, minimizing downtime and ensuring data integrity.
- Conducted Azure cost optimization across the platform, identifying underutilized resources and optimizing resource allocation in pipelines, resulting in cost savings.
- Designed and implemented an automation solution leveraging Azure Backup services to efficiently restore specific files from designated dates on a Linux Virtual Machine.
- Provided technical guidance and mentoring to junior team members, fostering skill development and knowledge sharing within the team.
- Provided Azure Administrator support for Cloud Workloads, ensuring smooth operations and troubleshooting any issues that arose.
- Developed an automation to manage Azure Agents and their lifecycle management for non-supporting systems.
- Utilized Azure Key Vault in Azure DevOps Pipelines, Ansible Automation Platform and other tools to securely manage and safeguard sensitive information such as API keys, secrets, and certificates within the platform, ensuring robust security measures and streamlined access control for critical resources.

### **Platform Engineering**

- Defined RHEL 9 SOE Architecture using image builder for Azure and kickstart for satellite deployments along with Ansible Automation for SOE baseline for fully automated and dynamic OS deployments.
- Designed a LEAPP upgrade process with report generation, dynamic remediations, closure, rehardening and validation tasks to facilitate seamless and standardized in-place RHEL major upgrades removing redeployment of the infrastructure and migration of the application.
- Designed a platform for the development of Ansible execution environments, streamlining the creation and automated updating of these images to ensure the efficiency and consistency of the deployment process.
- Designed application family onboarding process to Ansible Automation Platform and Azure DevOps platform and developed Ansible automation to deploy AAP and ADO configurations like projects, repos & its policies, teams, organizations, access groups, smart inventories and many more
- Carried out POC for Event Driven Ansible. Deployed EDA solutions for internal projects like infrastructure monitoring, GitOps, Dynamic IaC Playbooks etc.
- Automated a server decommissioning framework integrating ServiceNow, Dynatrace, Nimsoft, Satellite, IDM, VMware, Azure.
- Onboarded windows platform and network devices to Ansible Automation platform for various automations
- Developed Ansible collection with roles designed for managing the Oracle Unified Directory access management.

# Infrastructure as Code (IaC) / Configuration as Code (CaC) / Compliance as Code

- Deployed the Ansible roles for Infrastructure as Code (IaC) and Configuration as Code (CaC) for Satellite, Ansible Automation Platform and RedHat IDM for recoverable, simplified and versionized config management.
- Designed, deployed, and maintained a scalable and efficient container platform using Kubernetes and Podman for running applications such as httpd and Tomcat. Implemented Ansible automations for container deployments, scaling, and management processes.
- Architected OS Hardening using Dynamic Ansible playbook generation based on the OpenSCAP profile enabling precise control over hardening resulting in compliance as code with perfect hardened Infrastructure.

#### Infrastructure Automations

- Implemented multiple bash/python/perl/powershell scripts to streamline complex and time-consuming tasks such as cluster monitoring, LDAP access mirroring, and IDM access standardizing, saving 300 hours of work per month.
- Fully automated Linux Patching with addons like reporting compliance status and application start/stop/validation providing highest application uptime saving \$3.5 million USD and around 20000 hours annually.
- Deployed a website that updates periodically using an ansible playbook that validates environment with standards parameters set by clients making vulnerability visible and validating new build servers at ease.
- Automated access provisioning on the RedHat IDM platform by integrating Azure tags for Azure and Satellite parameters for OnPrem deployments to configure User groups, Host groups, HBAC, Sudo Rules configurations.
- Automated ServiceNow change management for Ansible Automation Platform's multiple job invocations.
- Utilized Rest API for RedHat Insights Service Management. Automated SCAP profile tagging to all hosts based on the host criteria. Automated host group creation based on applications deployed providing better overview of Infra.
- Developed systemd services/cronjobs to autostart application at boot removing dependency of application team in many activities.
- Automated disaster recovery process saving downtime during the crucial time.
- Developed automations to deploy applications like Splunk, Dynatrace, Autosys, Nimsoft, CyberArk PTA, CyberArk PSM, IBM MQ, Httpd, Tomcat, etc
- Developed Ansible playbook for populating Satellite VM Parameters and VMware tags with the Application information making satellite a true source of information for other automations.
- Automated SOS Report uploading to RedHat Portal for disconnected systems for quicker vendor issue resolutions

# Automated Reporting (via Ansible Automation Platform)

- Weekly Patching and Compliance report from all environment with missing patches and CVE details from each server along with the non-reporting server details
- RedHat system hardening report which ensures all hardening rules have been applied to the OS
- Daily Solaris Hardware monitoring and reporting of every aspect of the hardware
- Monthly Solaris hardware capacity utilization report providing insights on capacity management
- Daily RedHat support cases report that consolidates all Red Hat support cases and their status
- OS handover report which ensures the integrity of the OS when it is cut over from project to production phase
- · Fully automated decommissioning report containing compute released as well as proper cleanup of servers
- LEAPP Pre Upgrade analysis report stating issues observed on the system, remediations report informing status of the remediations taken, Closure report to ensure proper RHEL major version upgrade

- Delivered projects involving OS building on VMware and physical hardware from Satellite/bare metal
- Deployed clusters systems like PCS, VCS, and SunOS on Linux and Solaris servers and provide L3 supports to cluster related requests
- User and Access management by OpenLDAP, OUD, ODSEE & RedHat IDM
- Provided L3 operational support on all high priority Unix related incidents as well as all operational requests.
- Created and maintained a ServiceNow Kanban Dashboard for increasing work effectiveness of my team and avoid any SLA breaches.
- Created a SRE SLI/SLO Dashboard on Dynatrace to have a flawless monitoring on the Linux Infrastructure.
- Worked in SRE sprints to optimize the Unix Infrastructure and ensure its redundancies.
- Created and maintained a standard operating procedure (SOP) and Known Error Database (KEDB) documents for all team members.
- Recorded a series of comprehensive knowledge transfer sessions for new team members, aimed at providing an indepth understanding of the organization's processes and technologies.

### FORMAL EDUCATION

Smt Kashibai Navale College of Engineering, Pune - June 2018

Bachelors of Engineering in Mechanical Engineering

First Class with Distinction || Top 5% in the department || The Google India Challenge Scholarship

Chess Champion and College chess representor || Secured top 3 spots in all Hackathons

Rajarshi Shahu Junior Science College, Latur - May 2014

Higher Secondary School Certificate (Computer Science, Physics, Chemistry, Mathematics) 75.69%

Top 1% in the department || Developed my First Website

Sanata Vidya Mandir, Murud - March 2012

Secondary School Certificate 97.09%

Top 3rd Rank in School | Student Representor | Culture event organizer

### ONLINE ACCREDITATIONS

- Udacity: Google India Challenge Scholarship: Front-End Web Dev
- LinkedIn Learning: Linux System Engineer: Bash Shell Scripting for Automation
- LinkedIn Learning: Azure Administration Essential Training
- LinkedIn Learning: Developing CI/CD Solutions with Azure DevOps
- LinkedIn Learning: Azure Active Directory: Basics
- LinkedIn Learning: Ansible Essential Training
- LinkedIn Learning: Azure Administration: Monitor and Back Up Azure Resources
- LinkedIn Learning: Programming Foundations: Fundamentals
- LinkedIn Learning: Getting Started with Python
- LinkedIn Learning: Learning Python
- LinkedIn Learning: Building a Web Application on Microsoft Azure
- LinkedIn Learning: Getting Started as an Azure Developer
- LinkedIn Learning: Getting Started with Microsoft Azure Administration
- LinkedIn Learning: Microsoft Azure: Security Concepts
- LinkedIn Learning: Azure for DevOps: Continuous Integration
- LinkedIn Learning: Azure Administration: Implement and Manage Storage
- LinkedIn Learning: Cloud Architecture: Design Decisions
- LinkedIn Learning: Learning Amazon Web Services (AWS) for Developers

### CERTIFICATIONS

- ✓ Microsoft Certified: DevOps Engineer Expert / AZ-400
- Microsoft Certified: Azure Developer Associate / AZ-204
- ✓ Microsoft Certified: Azure Administrator Associate / AZ-104
- ✓ Microsoft Certified: Azure Fundamentals / AZ-900

### TECHNICAL SKILLS

#### Platforms:

Cloud: Azure, AWS, GCP

RedHat: RHEL, Ansible Automation Platform, Ansible Tower, Automation Hub, OpenShift, Satellite, IDM, Insights Microsoft: Azure Portal, Azure DevOps, Azure Kubernetes Services, Azure RedHat OpenShift, Azure Pipelines Oracle: Solaris, Oracle Directory Service Enterprise Edition, OpsCenter, Oracle Unified Directory Clusters: Pacemaker Cluster, Veritas Cluster, SunCluster

**DevOps:** Ansible, Azure DevOps, Docker, Git, Azure, Kubernetes, Jenkins, Terraform, Bash, Jira, Splunk, Confluence, Dynatrace, Bitbucket, ServiceNow, Grafana, Nimsoft

**Side Skills:** VMware, Python, HTML5, CSS3, JavaScript, jQuery, ReactJS, Powershell, Machine Learning, Ethical Hacking, Android OS Development

# PERSONAL SKILLS

# Linguistic Skills

- Marathi (Mother tongue)
- English (Certified for Business Level)
- Hindi (Proficient Level)

#### Communication Skills

- Presentations on
  - RHEL InPlace LEAPP Migration Architecture and Automation Process
  - Azure Infrastructure: Standard Operating Environment & Best Practices
  - RedHat Ansible Automation Platform: History and Ecosystem
  - Podman vs Docker
  - How to Harden a Linux Machine
  - Ansible as a Configuration Management tool
  - Ansible as a Reporting generation tool
  - RedHat Identity Management for Access and DNS Management
  - Infrastructure Management via RedHat Satellite
- Knowledge sharing sessions for all Infrastructure tools like RedHat Satellite, RedHat Ansible Automation Platform, RedHat Identity Management, Solaris LDAP, Azure Portal, Azure DevOps.

#### **AWARDS**

- Beyond Excellence Award x2
- Best Team Award x3
- Most Valuable Team Member x3
- Star of the Month Award x4
- Maitree Prize Award
- On the Spot Award x6