

# ARSHAD ALAM ANSARI

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## **SUMMARY**

- Innovative Software Engineer with over 13 years of experience in designing and implementing distributed, scalable systems throughout the full Software Development Lifecycle (SDLC), including continuous integration, with strong exposure to Agile methodologies.
- Demonstrated excellence in project and time management with a proven ability to solve complex problems, communicate effectively across teams, and work independently with minimal supervision.
- Proven ability to independently design and develop microservices, automation frameworks, and backend systems for storage and banking using Golang, Python, Shell, Groovy, AWS, GCP, Kubernetes, and Docker—driving efficiency, coverage, and product quality improvements.
- Expertise in designing and implementing end-to-end integration solutions, CI/CD pipeline development and management (Jenkins, GitLab CI/CD), and developing systems for monitoring operational health and quality metrics for highly available products.
- Skilled technical lead and collaborator with development, product management, and UX teams in Agile/Scrum environments. Experienced in translating requirements into technical designs and software, and adept at solving challenging technical problems including troubleshooting complex production issues.

## **WORK EXPERIENCE**

### **AMEX**

***JUL 2024 – PRESENT***

#### **Senior Software Engineer (Golang, Automation & Infrastructure Development)**

- Led the technical design and development of a Cucumber-style BDD framework using Godog in Golang to automate product promotion scenarios by integrating with multiple microservices via API calls. Validating 1,000+ test cases and enhancing software quality and release confidence.
- Led development and code reviews for Golang-based automation frameworks, promoting best practices and mentoring team members across geo-distributed environments.
- Deployed and managed microservices on Kubernetes for AMEX product qualification workflows, while troubleshooting integration issues and test failures to ensure stability and reliability.
- Collaborated across the full SDLC with PMs, senior engineers, and QA teams; authored technical documentation on Confluence and internal wikis for knowledge sharing.
- Contributed to customer-focused qualification initiatives, delivered client demos, and coordinated onsite-offshore teams for task tracking, delivery oversight, and quality assurance.
- Designed and deployed scalable, fault-tolerant architectures on Google Cloud Platform (GCP) using Compute Engine, Kubernetes Engine (GKE), and Cloud Functions.
- Implemented secure IAM roles, VPC networks, and firewall rules to ensure compliance with enterprise security standards.

### **DELL**

***MAR 2023 – JUN 2024***

#### **Senior Software Engineer (Python, CI/CD, Observability)**

- Designed and developed Python- and HTML-based microservices using Flask APIs for storage search, reservation, email notifications, and rack dashboard generation.
- Integrated PostgreSQL and Redis for efficient data storage and retrieval; containerized microservices with Docker, including writing Dockerfiles and managing deployments.
- Built test automation solutions in Python for cloud and on-prem networking environments, integrating with Jenkins CI/CD pipelines and AWS services (CodeCommit, CodeBuild, CodeDeploy, CodePipeline).
- Monitored microservice performance on temporal clusters using Prometheus and Grafana, and Collaborated with teams using Jira to analyze, troubleshoot, and resolve complex software defects, ensuring system robustness and reliability.
- Documented features in Confluence and conducted client demos, ensuring transparency and stakeholder alignment throughout the delivery cycle.
- Optimized GCP resource utilization and cost by enabling autoscaling, rightsizing, and monitoring with Cloud Monitoring and Cloud Logging.
- Integrated CI/CD pipelines with Cloud Build and Artifact Registry for automated deployments across multiple environments.

### **HEWLETT PACKARD ENTERPRISE**

***MAY 2021 – FEB 2023***

#### **Senior Software Engineer (Golang & Python)**

- Developed a Singularity plugin in Golang to support volume operations (Create/Delete/Get/List) on MapR and SpectrumScale storage platforms.
- Designed and implemented a Robot Framework in Python for automated testing of Singularity plugin functionalities across various volume scenarios, reducing manual testing time by 2 hours per cycle.
- Built CDC code in Python using FastAPI, Uvicorn, and REST APIs, deployed on the Control Plane to automate

- MapR/SpectrumScale cluster creation, reducing setup time by 2 hours per cluster.
- Deployed GLM, CSP, and CDC microservices on Kubernetes using Helm charts and Argo CD, enabling automated creation of arrays, flavors, and volumes.
- Monitored microservice logs with Logstash, Elasticsearch, and Kibana, documented features on internal wikis, delivered sprint demos, and followed Agile practices using JIRA for task tracking.
- Designed and deployed scalable applications using AWS EKS, ECS, EC2, and S3 for high availability and performance.
- Managed Amazon EKS and ECS clusters for containerized workloads, implementing auto-scaling, service discovery, and rolling updates.
- Optimized S3 storage usage with lifecycle policies, cross-region replication, and fine-grained IAM access controls.

## **HEWLETT PACKARD ENTERPRISE**

**MAR 2018 – APR 2021**

### **Senior Software Engineer (Golang Development & Automation)**

- Developed Container Storage Provider (CSP) and Container Storage Interface (CSI) drivers in Golang for volume provisioning on HPE intelligent storage using REST APIs and gRPC, leveraging interfaces, goroutines, concurrency, and channels.
- Provisioned Kubernetes clusters from scratch, authored Dockerfiles, and created Helm charts for deploying CSI/CSP microservices.
- Implemented infrastructure as code (IaC) using Terraform to automate provisioning, deployment, and scaling of cloud resources.
- Deployed CSP/CSI drivers on Kubernetes, created volumes on storage arrays using Secrets, StorageClass, PersistentVolumeClaim (PVC), and validated end-to-end provisioning by deploying pods consuming volumes.
- Designed and developed automated unit test frameworks in Golang, significantly reducing manual testing efforts and improving test coverage and execution time.
- Authored documentation on SCOD and internal wikis, and conducted CSI/CSP feature demos at the end of each sprint.

## **HEWLETT PACKARD ENTERPRISE**

**SEP 2013 – FEB 2018**

### **Senior Software Engineer (Python Development, DevOps&Testing)**

- Design and Development of Ansible Configuration Management Tool libraries in Python for HPE 3PAR storage.
- Writing ansible-playbooks for managing multiple storage volumes, remote copy, cloning on storage servers which saved manual efforts.
- Test case creation using mock and flask module for covering ansible libraries code.
- Testing hpe3par-client functionality using ansible, devstack and docker containers.
- Automated Virtual Machine deployment script using power- shell script for Hyper-V server 2008R2/2012/2012R2, which saved 1.5 hours per VM creation.
- Architected, designed and developed Storage Processor(SPOCC UI) backend code in Python,C++ and shell scripting, HTML for upgrading/downgrading Storage OS, Monitoring Storage Status. Integrated RDA agent by leveraging Kafka producer and consumer messaging system to collect storage logs and send it from HPE Storage to HPE STaTS.
- Enhancing, debugging and fixing SPOCC UI to when any bug found during Storage OS upgrade.
- Developed Selenium Python framework for Cloudbank UI testing.

## **EMC**

**JUN 2012 – AUG 2013**

### **Software Engineer (C, C++)**

- Debugging in simulation and hardware using Windbg. Bug fixing for the Multi Core Raid related issues using C language Test case creation and testing.Dump Analysis and SP collects analysis.
- Developed User interface for both serial and TCP communication using language C/C++ and Test case creation and testing.

## **TECHNICAL SKILLS**

- **Languages:** Python, Golang, Shell scripting, PowerShell, Groovy, C++, HTML.
- **Operating Systems:** Windows, Ubuntu, RHEL, SLES, MacOS.
- **Web Technologies & APIs:** REST, Flask, FastAPI, RESTful APIs, JSON, HTTP/HTTPS, Gorilla Mux, gRPC, kafka.
- **Tools/Utilities:** Git, Jira, CircleCI, Ansible, Helm,ArgoCD, Prometheus, Grafana, Jenkins, Bugzilla, Panda, Flask, FastAPI.
- **Debugger:** WinDbg, PyCharm, Golang Editor, Visual Studio.
- **Test frameworks:** BDD(Cucumber/Godog), Go testing framework, Python selenium, Robot Python, PyTest.
- **Cloud Native:** AWS(IAM,S3, EC2, ECS,EKS,DynamoDB, CloudWatch), GCP, Docker, Kubernetes, OpenShift, Singularity, Terraform, Hyper-V Windows Server 2008R2/2012/2012R2,VMware ESX.

## **EDUCATION**

- **Master of Technology(Information Technology),** IIIT Allahabad, India.
- **BTech(Computer Science),** Uttar Pradesh Technical University, India.

**June 2011**

**June 2009**