

Consultant profile

Mister

Arian Jamborzadeh

IT Consultant



Quick overview

8+ years of professional experience in developing and operating complex software and cloud- & on-premise projects with a focus on DevOps and platform engineering.

Experienced in planning and developing complex software projects - focus on fullstack development and distributed systems.

Experienced in planning and operating complex network and infrastructure projects (cloud, hybrid-cloud & on-premise).

Special experience in the area of software engineering and system design & architecture - focus on Cloud, Kubernetes, GitOps and automation.

Contact details:

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Tech Stack

Cloud

- Azure
- AWS
- GCP
- Hetzner

Programming languages

Backend:

- Python (Flask, Pandas, FastAPI), Java (Spring Boot), Go, Bash, PowerShell
- Insomnia, Postman

Frontend:

• JavaScript (React.js, Next.js), CSS, HTML

Containerization & Infrastructure as Code

- Kubernetes (Azure Kubernetes Service (AKS),
 Google Kubernetes Engine (GKE),
 Amazon Elastic Kubernetes Service (EKS), OpenShift Container Platform (OCP), RKE2, k3s, Helm, Kustomize
- Docker, Docker Compose, Docker Swarm, Podman, Podman Compose, Kind
- Terraform, Ansible, PowerShell DSC
- NGINX, LetsEncrypt, Apache, Cert-Manager, External-DNS

DevOps

- ArgoCD, Azure DevOps
- GitLab CI/CD, GitHub Actions, Cloud Build
- Shell Scripts (Bash), Linux
- Kubernetes, OpenShift, kubectl, oc, docker-compose
- Prometheus, Kibana, Grafana, OpenSearch, Fluentbit, Coroot, Datadog, Dynatrace

Operating systems

• Linux (Ubuntu, Red Hat Linux (7-9), Debian), Windows, macOS, MicroOS

Data Services & Databases

• MariaDB, MySQL, Redis, SQL, PostgreSQL, Keycloak, etcd

Tools

- Jira, Confluence, Scrum, Kanban
- Git, GitHub, GitLab
- VisualStudio Code, PyCharm, Intellij IDEA
- ServiceNow, Sharepoint

Further training & certifications



- Google Cloud Certified: Cloud Architect Professional
- Codefresh Certified: GitOps for Enterprise
- Codefresh Certified: GitOps at Scale
- Codefresh Certified: GitOps Fundamentals
- Microsoft Certified: Azure Administrator Associate
- Microsoft Certified: Azure Solutions Architect Expert
- Microsoft Certified: Azure DevOps Engineer Expert
- Red Hat Certified Engineer
- Red Hat Certified Specialist in Containers and Kubernetes
- Red Hat Certified Specialist in OpenShift Administration
- Red Hat Certified System Administrator

Project experience

Position: Staff Platform Engineer **Timeframe:** 06/2024 - 03/2025 **Industry:** Public / Banking

Objective:

• Further development and optimization of public and private cloud environments based on OpenShift for clients in the public sector and banking, to ensure scalability, security, and efficiency at the highest level.

Activities:

- Continuation and improvement of platform automations using Infrastructure as Code (IaC) and efficient GitLab CI/CD pipelines, as well as Ansible, to achieve efficiency gains and minimize manual processes.
- Expansion and fine-tuning of OpenShift clusters to ensure high availability, maximum performance, and robust security, applying DevOps best practices and the latest BSI security standards.
- Conducting training sessions, workshops, and coaching for internal teams to promote knowledge exchange and deepen competencies in handling cloud technologies, container orchestration, and OpenShift.
- Development of intelligent automations for application versioning to enable seamless deployments and rollbacks by implementing GitOps principles and continuous deployment strategies.
- Development of a powerful Python application for automatic synchronization of tenant data to enable smooth integration with Red Hat Advanced Cluster Security and consistently apply company-wide security policies.
- Implementation and ongoing development of a comprehensive observability stack based on **OpenTelemetry** and **Dynatrace**, including the creation of customized dashboards and alerts for proactive system monitoring and troubleshooting.
- Design and implementation of a comprehensive update and patch process for OpenShift clusters and internal platform components to meet the highest security standards and compliance requirements, including the automation of testing and deployment steps.

Technologies: OpenShift, Kubernetes, Red Hat Advanced Cluster Security, OpenTelemetry, Dynatrace, Python, Git, GitOps, CI/CD pipelines, Infrastructure as Code (IaC), DevOps, Continuous Deployment, Azure, Ansible, Prometheus, Grafana, Docker, Linux, Agile Methodologies, ArgoCD, VMware

Position: Head of DevOps
Period: 06/2023 - 08/2024
Industry: E-Commerce

Goal:

 Conception and development of a platform to operate a webshop based on Kubernetes in combination with a Multi-Cloud Approach.

Tasks:

- Design and implementation of the target architecture based on **Kubernetes** on the **Hetzner Cloud** as well as on the **Plus Server Kubernetes Engine**.
- Planning and management of the project with regard to the following points: resources, budget, service provider management, architecture.
- Buildup of the department *Platform & DevOps* with the focal points **Automation**, **Infrastructure as Code**, **GitOps**, **Cloud Services**, **Stability**.
- Management of the department's employees of Platform & DevOps (10+ employees)
- Development of **Dockerfiles** for containerizing Java **Spring Boot** and **Python Flask** Applications.
- Building of Gitlab CI/CD Pipelines for automatic testing and creation of Container Images for all applications (Self Contained Systems) of the web shop based on Java Spring Boot & Gradle.
- Development of the **Terraform** Automation for provisioning and initializing all infrastructure components (**Kubernetes**, **ArgoCD**, etc.)
- Design and implementation of automated deployments and based on ArgoCD
- Development of **Helm-Charts** for the deployment of the web shop applications and platform services (**Kafka, Solr, Cert-Manager, Nginx**)
- Construction of a Monitoring Stacks based on Prometheus and Grafana.
 Connection of all setups for monitoring including Alerting over Pagerduty.
- Construction of a Logging Stack based on Opensearch & Fluentbit
- Design and setup of the automated synchronization of sensitive content (system credentials, certificates, passwords, etc.) using a Hashicorp Secrets Vault.
- Setup of **Google Cloud Buckets** for external storage and distribution of sensitive configuration files.
- Building and setup of an IAM System based on Keycloak for secure authentication on critical systems with the help of Role Based Access Control (RBAC).
- Setup of a Kafka Cluster for asynchronous delivery of message queues.

Technologies

Java, Java Spring Boot, Gitlab, Gitlab CI/CD, Gitlab Container Registry, Terraform, GCP, Google Cloud Bucket, Docker, Dockerfile, Prometheus, Grafana, Opensearch, Fluentbit, Kubernetes, PSKE, Kafka, Solr, Cert-Manager, Nginx, Java, Spring Boot, Gradle, Python, Flask, ArgoCD, Helm, Hashicorp Secrets Vault, Keycloak

Position: Senior Cloud Consultant

Period: 12/2022 - 07/2023

Industry: Public

Goal:

 Conceptualization and development of infrastructure components and platforms for automating processes and providing development and operations environments within a private cloud environment.

Tasks:

- Developed a GitLab CI/CD pipeline for the automated provisioning of virtual machines for software development teams using Ansible, GitLab CI/CD, Bash scripting, and PowerShell.
- Designed and implemented a Python FastAPI REST API to create and update DNS zone files, integrating an OAuth-based authentication interface.
- Authored a Dockerfile to containerize the Python FastAPI REST API application, standardizing deployments as Docker containers.
- Automated the deployment process of the Python FastAPI REST API as Docker containers through a GitLab CI/CD pipeline using Puppet.
- Created network topologies for the service designs deployed on customer platforms within a private cloud (VMware).
- Developed automations for managing and updating Squid-based proxy servers to enable external connectivity of virtual machines using Ansible, Bash scripting, and Squid.
- Implemented unit tests to ensure the reliability of key modules during the build process of backend applications developed in Java and Spring Boot, containerized with Docker.
- Set up infrastructure automation to provision and initialize infrastructure components leveraging **Terraform** and **Ansible**.
- Created workflows for build, release, and deployment processes to achieve automated versioning and delivery of applications using GitLab CI/CD, Bash scripting, and Ansible.
- Developed UI tests to ensure the platform's frontend functionality using Selenium and Next.js.

Technologies

Python, FastAPI, Java, Spring Boot, GitLab CI/CD, Ansible, Puppet, Bash Scripting, PowerShell, Docker, Dockerfile, Terraform, Red Hat Enterprise Linux, Windows Server, VMware, Next.js, Selenium, GitHub Actions

Position: Senior Platform Engineer (Cloud)

Period: 11/2021 - 12/2022

Industry: Finance

Objective:

 Development of cloud infrastructure, CI/CD tools, and automation solutions to optimize processes and provide development platforms based on OpenShift clusters.

Activities:

- Designed and implemented a REST API for processing existing and new data sets, including integration of PostgreSQL, using Python and Flask for efficient data management and analysis.
- Developed **Dockerfiles** to containerize the Python application, enabling a standardized and scalable deployment pipeline with **Docker** and **Azure DevOps**.
- Developed Azure Pipelines for automating the build and deployment processes of containerized Flask REST APIs, leveraging Azure DevOps, and deploying to Azure Container Instances.
- Automated documentation page creation with Ansible and Jinja2 templates, providing centralized, detailed information about infrastructure updates and patch processes.
- Created **Terraform** automations for provisioning secret stores in **Azure Key Vault**, ensuring secure handling of authentication data as Infrastructure as Code (IaC).
- Configured and migrated **Kubernetes** clusters using **Azure Kubernetes Service** (**AKS**) and **Helm** charts to efficiently manage and scale workloads.
- Developed automated notification processes for the start, status, and completion of patch day procedures using Ansible for workflow orchestration and Jinja2 templates for dynamic content generation. Relevant cluster and customer data were retrieved from the CMDB (SQL) via Python scripts and integrated into email notifications to standardize customer communication.
- Created Python-based automations to synchronize and update customer data in Azure DevOps repositories, integrating these updates into the CMDB (SQL).
- Enhanced a Docker base image for use within **Azure Pipelines**, increasing the flexibility and efficiency of **CI/CD** processes.
- Automated **Red Hat Enterprise Linux (RHEL)** server administration using **Ansible** and **Bash Scripting** to minimize manual configurations.
- Administered **OpenShift** clusters for running containerized applications, utilizing **Kubernetes**, **OpenShift**, and **Docker**.
- Worked within **Scrum** teams to ensure iterative and agile development processes.

Technologies

Python, Flask, Docker, Dockerfile, Azure DevOps, Azure Pipelines, Azure Kubernetes Service (AKS), Helm, Terraform, Ansible, OpenShift, Kubernetes, SQL, Jinja2, Bash Scripting, Red Hat Enterprise Linux (RHEL), Scrum

Position: Senior Azure DevOps Engineer

Period: 06/2021 - 12/2021 **Industry:** Software Engineering

Goal:

 Development of a Plugin for automated installation and patching of a central Argo CD instance (Namespace restricted) on existing and new OpenShift Clusters

Tasks:

- Structuring and processing of work packages through Scrum
- Creation of an **Azure DevOps Pipeline** for triggering **Ansible** Automations within a **Docker Containers** to run the installation tasks
- Writing of an Ansible Role for automatic execution of the ArgoCD installation with dynamic customer data as input.
- Writing of Kustomize Modules for automatic pre-formatting of central Kubernetes Output resources from the Argo CD GitHub Repository and subsequent basic installation
- Development of a test module with Ansible to query the necessary installation steps based on the state of the following workloads on the clusters: Certmanager, Keycloak (OpenID Connect/OAuth2.0), Argo CD, Roles and Rolebindings.
- Creation of Jinja2 Templates for the dynamic rollout of all necessary Kubernetes/OpenShift Resources (Namespaces, Roles, Role Bindings, ConfigMaps, Secrets).
- Writing of automated tests in Ansible to control specific installation and/or update tasks
- Automation of the creation/editing/removal of Kubernetes and OpenShift Resources in the target cluster to adjust application behavior and application permissions
- Automated integration of the Argo CD application server into the existing Keycloak instance of the cluster for authentication through Keycloak SSO.
- Development of all Kubernetes and Argo CD resources as YAML Files for the automated test suite of the installed Argo CD.
- Building the automated test suite as part of the installation and deployment of test workloads Argo CD based on defined YAML Files in a Azure DevOps Repository
- Administration of Red Hat OpenShift Container Platform (RHOCP) Cluster as a Red Hat Certified specialist in OpenShift Administration
- Development and administration of containerized applications on Red Hat OpenShift Container Platform (RHOCP) Clusters as a Red Hat Certified specialist in Containers and Kubernetes

Technologies

Azure Pipelines, GIT, Kubernetes, OpenShift, Python, Ansible, Docker, Harbor Image Registry, Keycloak, Argo CD, Kustomize, Bash Scripting. OpenID Connect, OAuth2.0

Position: IT Systems Engineer (Cloud)

Period: 01/2021 - 11/2021

Industry: Managed Services (PaaS)

Goal:

• Further development of an automated **Gitlab CI/CD Pipeline** for installing and updating new and existing **OpenShift Clusters**.

Tasks:

- Development of an **Ansible** Role for automatically documenting cluster-specific data in the central **CMDB** (**SQL**) such as cluster name, IPs and network ranges, node size and quantity, namespaces, etc.
- Division of tasks into **Sprints** with **Scrum** to complete the tasks
- Creating of Ansible Playbooks for automatically checking and adapting the following OpenShift Resources on existing and newly installed clusters: Namespaces, Templates, Namespace- and Resource Quotas, Limits, Limit Ranges, OpenShift-Logging, Images, Roles andCluster Roles, Role Bindings and Cluster Role Bindings.
- Automated creation of a Harbor Image Registry to manage Images with Terraform
- Writing of a module with Python and Ansible for automatic documentation of the most important customer and cluster data in the README.md File of the associated Gitlab Repositories.
- Design of OpenShift Project-Templates for automatically rolling out predefined Project resources when creating new namespaces in the OpenShift Cluster.
- Creation of an Ansible Automation to query and build/patch the OpenShift Project templates to improve the administration of managed namespaces.
- Development of automated **Gitlab CI/CD** Stages to trigger all automations to patch all of the **Kubernetes/OpenShift** Resources.
- Automated setup of **Keycloak** instances for managing customer credentials
- Development and administration of containerized applications on Red Hat OpenShift Container Platform (RHOCP) Clusters as a Red Hat Certified specialist in Containers and Kubernetes

Technologies

Gitlab CI/CD, GIT, Kubernetes, OpenShift, Terraform, Python, Ansible, Docker, NetApp Storage, Trident, Keycloak, Scrum, RedHat

Position: Senior Azure DevOps Engineer

Period: 08/2019 - 12/2020

Industry: Automotive

Goal:

 Planning and implementation of the development of several managed Azure Kubernetes Service (AKS) Clusters with High availability and Stability as main goals for enterprise customers through Azure DevOps Pipelines.

Tasks:

- Creation of Azure DevOps Repositories for all source code files.
- Planning of Tasks via a Kanban Board.
- Lead of internal and external Engineers for development tasks.
- Creation of **Azure Resource Groups** as well as **Azure Container Registries** for storing container images.
- Automation and IaC definition of the infrastructure with the help of Terraform
- Planning and design of the necessary Network architecture as well as setting up customer specific Network adjustments throughAzure Virtual Network (VNET).
- Setup of all customer requirements into the initial configuration files with a focus on Permissions, Azure Network Security Groups (NSG), Resource Quotas, Azure Load Balancing (Azure Application Gateway) and Cluster accesses of internal and external endpoints (Azure VPN Gateway).
- Setup and administration of relevant Kubernetes resources through Ansible (Namespaces, Deployments, Network Policies, Egress/Ingress-IPs, PodDisruptionBudgets, Resource Quotas, Roles und Rolebindings, Cluster Roles und Cluster Rolebindings, Templates, Images, etc.).
- Setting up of **Azure Firewall** Rules for the private/public access of the cluster.
- Building and developing an authentication interface to the cluster using Azure Key Vault.
- Maintain relevant project documents within the dedicated **Sharepoints**.
- Providing 2nd and 3rd level support through ServiceNow ticketing.

Technologies

Azure DevOps Pipelines, Azure Firewall, Azure Load Balancing, Azure Application Gateway, Azure VPN Gateway, GIT, Kubernetes, Azure Kubernetes Service (AKS), Terraform, Python, Ansible, Docker, Ubuntu, Harbor Image Registry, Azure Key Vault, Scrum, Kanban, Sharepoint, ServiceNow, Oauth2.0, OpenID Connect, User Federation (Azure AD, Keycloak, etc.)

Position: Process Automation Engineer

Period: 04/2020 - 01/2021

Industry: Biotech

Goal:

 Development and deployment of a containerized Python Flask REST API for receiving, processing and forwarding critical data from RedHat Enterprise Linux Servers for administration purposes.

Tasks

- Design and structuring of the data template as **YAML** files for agglomerating the most important cluster data.
- Writing of a **Python module** to pull, commit and push from **Git Repositorys**.
- Creating a data parser from **JSON** to **YAML** in **Python** which merges multiple data streams into a predefined structure.
- Configuration and implementation of the logic for **Authentication** in **Python** with the help of **Flask-HTTPAuth**
- Development and containerization of a Python Application which sends critical data of the respective RedHat servers via the Command Line interface through CronJobs as POST Requests to the Flask REST API which processes and forwards the data to a Kubernetes management cluster.
- Building of **Helm Charts** and **Github Actions Workflows** for automatically deploying the applications on the target clusters.
- Building of Github Actions Workflows to automatically build and push Container Images of the applications to a Harbor Image Registry in the event of changes to the source code.
- Automated deployment of developed and containerized applications and workloads with **Github Actions Workflows** and **Helm**.
- Leading of three employees as a Scrum Team and priorization of work tasks.
- Administration of Red Hat Enterprise Linux (RHEL) servers as a Red Hat Certified System Administrator (RHCSA)
- Automation of the administration of Red Hat Enterprise Linux (RHEL) servers
- Development and administration of containerized applications on Kubernetes Cluster (On-Premise installation)

Technologies

Github, Github Actions, GIT, Kubernetes, Python, Ansible, Docker, Harbor Image Registry, Flask, HTTP-Requests, Helm, JSON, YAML, Scrum, RedHat Enterprise Linux

Position: Process Automation Engineer

Period: 07/2019 - 03/2020

Industry: Biotech

Goal:

 Development of a web application to record machine data from a production area in medical technology

Tasks:

- Development of a **React** Frontend for recording of production data from employees.
- Creation of a **Java REST API** for recording sent production data with the help of **Java Spring Boot**.
- Writing of Java Functions and hooks for data fetching of an existing machine API.
- Design and development of the Java Modules for formatting of the data for further processing. Dynamic calculation of KPIs and data cleaning based on environmental influences in the production areas.
- Design and development of the **Java** Modules for extrapolating data to calculate machine maintenance intervals.
- Translation of the developed modules from **Java** to **C#** to improve performance and maintainability.
- Containerization of the C# REST API in Docker based on .NET Core
- Deployment of the frontend and backend components as **Docker Container** through **Docker-Compose**.

Technologies

Java, Java FX, Java Spring Boot, C#, React, .NET Core, Docker, Docker-Compose

Position: Industrial Engineer 10/2017 - 05/2019

Industry: Automotive

Goal:

 Design and Development of a Kubernetes-based MVP for real-time analytics of automotive circuit board manufacturing processes, aimed at enhancing production throughput and efficiency through detailed KPI monitoring and optimization.

Tasks:

- Design of a distributed **Node.js** application architecture leveraging **Kubernetes** to ensure high availability, scalability, and fault tolerance.
- Integration of services and deployment strategies to support real-time data fetching and processing.
- Leading an engineering team in agile sprints for incremental development, testing, and deployment of the platform components.
- Development of the backend services using Node.js and Express, orchestrated by Kubernetes to manage containerized microservices efficiently.
- Setup of a **React**-based frontend, containerized and managed via **Kubernetes** for dynamic scaling according to user demand.
- Use of MongoDB as a containerized database service within Kubernetes for persistent data storage and high-speed data access.
- Utilized **Prometheus** and **Grafana** for detailed monitoring of infrastructure and application metrics within the **Kubernetes** environment, with real-time alerts and dashboards to oversee system health and performance.
- Enhanced security with network policies, Istio service meshes, and TLS encryption, along with implementing Kubernetes best practices like RBAC and Secrets management to safeguard against unauthorized access.
- Developed a comprehensive Jenkins CI/CD pipeline integrated with Kubernetes for automated testing, building, and deployment, alongside rigorous unit, integration, and security testing to assure platform reliability and safety.
- Managed the scalable deployment of the application across various cloud platforms for high availability and redundancy, coupled with detailed training sessions for users and IT staff to maximize system efficiency and troubleshooting.

Technologies

Kubernetes, Node.js, Express, React, MongoDB, Docker, Jenkins, Prometheus, Grafana, Istio, TLS, and various data visualization libraries.

linguistic proficiency

German: mother tongue Italian: mother tongue Persian: English: mother tongue

Full Professional Proficiency

Spanish: Basic knowledge

Initial and continuing education

- Master of Engineering (Nanotechnology/Process Automation), Nuremberg University of Technology
- Bachelor of Engineering (Materials Engineering), Nuremberg University of Technology

Please note that our consultants' profiles will also be presented to other customers in parallel until they are finally confirmed.