# Shah Solehria

| | | (604) 358 - 1493 | | <u>Email</u> | <u>Docker Swarm</u> | | <u>Python API</u> | | <u>LinkedIn</u> | | <u>Kubernetes Cluster</u> | | |

# **Abstract**

Skilled technology professional proficient in maintaining, developing, and managing full-stack multitier SAAS applications. Skilled in automating SDLC for enhanced efficiency, flexibility, scalability, and security.

# **Education**

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**Bachelor of Business Administration** 

**British Columbia Institute of Technology** 

Degree

**Business IT Management** 

**British Columbia Institute of Technology** 

Diploma

# **Notable Academia**

Decoding DevOps with Projects

**Udemy (progress 85%)** 

AZ-303 Azure Architecture Technologies

AZ-104 Microsoft Azure Administrator

AWS Certified Solutions Architect Associate

Udemy Udemy

Udemy

# **Work Experience**

#### **Senior IS Network Administrator**

Electrameccanica (Burnaby, BC)

(\*\*Due to the closure of all Canadian offices; company and staff were dissolved.)

- Mitigated risks of migration by executing failover testing, dependency analysis, backups, cloning disks, vendor coordination, & network isolation of dev servers.
- Provided quick response time for service requests with on-site computers, switches, SAN, & servers along with online SharePoint & Microsoft Office365.
- Improved physical server rack setup mitigating safety issues due to the placement of servers.
- Engineered windows migrations by preparing landing zone infrastructure (Azure), configuring Hyper-V images with PowerShell, creating Windows Server DNS handling for dev servers, utilization of Azure migrate for dependency analysis and failover testing, prepping Hyper-V by removing checkpoints, & configuring backups with Veeam.
- Quickly learned physical setup, CLI configuration, & console management of Fortinet FortiGate firewalls, designed plan for SDWAN built on top of existing ADVPN Dynamic tunnel VPN.

 Spear headed responsibility over Linux based Zscaler application including updating, patching, & troubleshooting issues (site wide outage resolved).

### **Systems Administrator (Promoted)**

CaseIQ or i-Sight (Remote)

- Drastically improved the entire department SLA by providing fast response times, training for peers, & building strong connections with CTO, Directors, Managers, Developers, Systems Administrators, Business Analysts, & clients.
- Single handedly rebuilt close to 50 Linux Yellowfin BI Servers (Java) & their databases
   (Postgres/MySQL) along with countless other Docker Swarm Containerized microservices stacks during a major datacenter outage.
- Quickly became an expert on Java based applications: cache issues, JDBC, Java servlets, Apache Tomcat, configuration management, & Java key tool (request CSR, sign, & install) for Yellowfin, PaloAlto, and Clearswift Gateway servers.
- Maintained many aspects of DevOps/automation: Jenkins, Ansible (Python/API), PowerShell scripts, Jenkins: pipeline-scripts/jobs, Batch scripts, & Bash scripts.
- Resolved countless build failures in Jenkins Jobs/Pipelines for developers.
- Deployed and maintained i-Sight Linux based JavaScript application on Azure, AWS, & VMWARE datacenter.
- Successfully worked with the following frameworks/ technologies in an Enterprise SAAS Company: Teleport, Kubernetes, OpenShift, NodeJS, NPM, Quartz, RabbitMQ, Redis, Nginx, Elasticsearch, Samba, Docker Swarm, make, SQL, JSON, XML, JAVA, ODBC, & Docker Compose.

#### **Junior Systems Administrator**

CaseIQ or i-Sight (Remote)

- Pioneered the containerized deployment of Yellowfin with Docker, Java, & PostgreSQL.
- Quickly became an in-house expert for all SQL operations in MySQL and PostgreSQL: retrieving deleted reports, resolving database corruption, optimizing performance, password resets, migrations, data extraction, transform, load, & built read replicas for PostgreSQL & MySQL.
- Quickly learned and excelled in aspects of Azure, AWS, SharePoint, Microsoft Defender, 0365, MDM, Autopilot, JAMF, Linux, application stack, Jenkins, Travis-CI, Windows, & Mac
- Designed solutions for secure backup and storage in accordance with GDPR with Veeam, Azure Backup, AWS Backup, & cloud storage solutions: cifs, blob, file shares, Azure Storage Account, Azure Blob, RDS, EC2, SFTP, & AWS EBS.
- Improved & maintained DNS/Mail security with Nginx Reverse Proxy custom configurations, SPF, DMARC, CSRs, & DKIM.
- Audited & provisioned external access through Checkpoint Firewall, Checkpoint, VPN, ClearSwift Mail Gateway, & PaloAlto (Azure VM and AWS PaloAlto).

# Skills (Extended)

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# NodeJS / JavaScript

• Stack experience Node.JS, Docker Swarm, Docker Compose, Kubernetes, HTML, CSS, NeDB, Linux, Nginx, GoDaddy, AWS EC2, & NPM.

- Successfully designed front-end and back-end API architecture for communication to eliminate inspect vulnerabilities.
- Securing code with best practices like front-end back-end segregation, Nginx route control, CORS, environment variables, image repositories, SCM, secrets, AWS subnets, Azure NSG base64, user rate limiting, SSL, firewalls, & key authentication.
- Complete knowledge of dependencies, runtime, and package requirements for NodeJS app deploys with NPM.
- Designing multi-replica Docker Swarm microservices architecture & custom Nginx reverse proxy with Buildkit for monolithic applications.

#### Java

- Skilled in automating the build process of Java applications with Jenkins Pipelines, Vagrantfiles, GIT, Maven, SonarQube, Nexus, unit testing, Docker, AWS ECS, GitHub actions, ActiveMQ, & Apache Tomcat.
- Worked extensively with JSP, Servlets, JDBC, configuring JVM, installing Java, & JRE.
- Can understand and work with code base to build with maven, run unit tests with Azure, and create CI/CD pipelines in Jenkins to deploy in either Docker Swarm or Kubernetes.

#### **Python**

- Proficient in full-stack development of Python APIs & webservers, utilizing frameworks such as FastAPI, Django, Flask, & Postgres.
- Implementing user authentication via JWT tokens for Python FastAPI endpoints.
- Built Python web UI using Jinja2 helping create visually appealing & dynamic interfaces.
- Experienced in end-to-end Docker migration for Python-based APIs, employing technologies like Docker Compose, Docker Swarm, Dockerfile images, Nginx reverse proxy, & dependencies with Pip.
- Hands-on experience in validation & testing of Python code & databases using assertions, ensuring code quality & data integrity.
- Experienced in automated creation & migration of databases to PostgreSQL using Python models & Alembic, facilitating efficient database management.
- Leveraged Python Pandas & VBA scripts to automate the extract, transform, & load of datasets.
- Automating OS functions in Linux and Windows.
- Building packages & deep understanding of virtual environments, dependencies, & architecture of web applications.
- Can completely automate build process, deployment on Kubernetes or Docker Swarm, & setup automated testing with pytest.

# DevOps - Continuous Integration/Continuous Deployment

- Proficient in utilizing build tools such as Jenkins (Groovy Scripts), AWS CLI, Azure CLI, Terraform, & CloudFormation.
- Experience in designing Docker microservices architecture, building Docker images, utilizing Docker Hub, creating Docker Compose scripts, & implementing automated API testing.
- Designing Jenkins pipeline IAC & building integrations for Node.js, Python, & Java.
- Engineering end-to-end Docker migration for Python-based APIs, Node.js apps, & Java apps.
- Automated deployments in both Windows & Linux environments.
- Integrating Jenkins plugins for Docker, GIT, SonarQube, Nexus, Maven, JDK, & AWS ECS.
- Automated builds with GitHub Actions & many other types of build triggers.
- Building Vagrant automation scripts for deploying VM in datacenter environments.
- Robust scripting ability in Bash and Python, error checking, logic, & remote execution.

# Kubernetes (https://kubernetes.shahdevelopment.tech/)

- Built multi-replica multi-deployment multi-node Kubernetes Cluster in AWS with Nginx Ingress Controller (AWS Network Load Balancer) all monitored with Lens Prometheus Monitoring integration.
- Automated deployment of Kubernetes infrastructure with AWS programmatic access GIT, Github, interactive bash scripting (Error checks, user confirmations, & cleanup), & Kops.
- Customized various configurations in Kubernetes to enable secure front-end & backend deployment communication.
- Deployed NodeJS, Java, & Python applications in Kubernetes.
- Secured & deployed applications to public world wide web with GoDaddy DNS, AWS Hosted Zones,
   & Kubernetes (nginx configuration, ingress routing, secrets, CORS, namespaces, cli args for nginx ingress controller SSL).
- Knowledge of Jenkins automation for Kubernetes and Helm as well.
- Built Dockerfile images manually as well as created automated process with interactive bash scripts with Error checks, user confirmations, & cleanup.
- Custom built NodeJS application (front-end, backend, & Nginx) to run on Kubernetes infrastructure.
- Can completely automate deploy of Kubernetes with one variables file and one script or through Jenkins pipeline automatically triggered by GIT push.

## Docker Swarm (https://shahdevelopment.tech/)

- Designed multi-replica Docker Swarm NodeJS application & Python API.
- Enabled communication between front end and backend and maintained hardened security through Nginx route control, AWS security groups, CORS, & SSL.
- Automated deploy with Docker Compose file.
- Automated complete deployment from image creation process with Dockerfile to deployment with docker stack deploy.
- Designing interactive batch/bash scripts (Error checks, user confirmations, & cleanup).

#### **Databases**

- Designed databases including normalizing data attributes into tables, dependency planning, implementation of primary key foreign key relationships.
- Migrating data between MySQL, PostgreSQL, MariaDB.
- Protecting databases with access control, backups (differential, full, etc), & Users...
- Integrated Microsoft SQL server with Syspro, setup backups, changed schema, & queried data.
- Automated database deploys/functions with Bash Scripts, Batch scripting, Ansible, Stored Procedures, Triggers, & PowerShell.
- Extract, transform, and load of large data sets into PowerBI, Tableau, Excel, QlikSense.
- Experience with both SQL and NoSQL (MongoDB & Redis) architectures and design methodologies.
- Utilized SQL, ORM, JDBC, ODBC for CRUD operations, administration, migrations, & schema changes.
- Mitigating user interaction with strategies like read only replicas with PostgreSQL Streaming Replication.
- Skilled with Database optimization, parameters tuning, & performance monitoring.

#### **AWS Cloud**

- Designing horizontal scaling of applications with autoscaling, Elastic Load Balancer, AMI, & EC2.
- Skilled in utilizing AWS CLI for build automation & operational processes.
- Automated S3 workflows using AWS Lambda functions, triggers, glacier, & storage lifecycle.
- Experienced in migrating Linux & Windows workloads to AWS, ensuring smooth transitions to the cloud environment while maintaining optimal performance & security.
- Deployed many apps with AWS services: Amazon MQ, EC2, ECS, EKS, RDS, VPC, Subnets, route tables, peering, Elastic Cache, & CloudFront.
- Secured connections to AWS by configuring VPN gateway & connectivity.
- Skilled in utilizing Route 53 DNS for managing domain name resolution, configuring private & public DNS zones, & implementing ACM for SSL/TLS certificates.
- Automating deployments & managing infrastructure (IAC) with KOPS Kubernetes & Prometheus Lens, Elastic Beanstalk, deployment templates, AMI's, AWS CLI, CloudFormation, and Terraform.

#### **Azure Cloud**

- Troubleshooting using tools like boot diagnostics, RUN Command, Azure Cloud Shell, & monitoring solutions to ensure system stability & performance.
- Extensive experience in implementing Azure RDS, storage solutions, & backups.
- Proficient in using Azure CLI for automating deployments in Windows & Linux environments, integrating with build tools like Jenkins for streamlined development.
- Automating permission allocations with Azure AD dynamic roles applied to groups & application SSO.
- Proven expertise in Azure migrations, image-based deployment for Linux & Windows systems, & replica management for effective disaster recovery strategies.

- Securing infrastructure with NIC configuration, NSG management, network peering, VNET's, & subnets.
- Transforming Azure workflows into code or designing IAAC / IAC for Azure.
- Functional experience with various Azure Services for applications and databases.

# Vagrant

- Strong experience fully automating stacks with multi-part vagrant files.
- Customizing instance resources like CPU, RAM, & Memory.
- Experience running Vagrant integration with VirtualBox.