MOHAMED ZOUARI

Senior Software Engineer

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SUMMARY

Senior Software Engineer with more than **5 years** of experience in designing, building, and managing large-scale cloud infrastructures. **2x AWS Certified**. Passionate about improving the software development experience.

TECHNICAL SKILLS

Programming Languages: Python, Java, Javascript, C/C++.

Cloud Providers: AWS.

Databases: SQL, MongoDB, PostgresQL, Kafka.

Automation Tools: Kubernetes, Docker, Terraform, Ansible, SaltStack, Jenkins, Gitlab CI/CD.

Monitoring and visualization: Dynatrace, Kibana.

EXPERIENCE

SAP | Senior Software Engineer

Jul 2022 - Present

- Deploying a Large-Scale Collector Application with AWS EKS:
 - Deployed a collector app on AWS EKS, efficiently managing scaling for large data volumes.
 - Integrated dynamic Kubernetes elements to improve system resilience through active collaboration.
 - Enhanced performance and reliability, reducing downtime by 80%.
- Creation of a database collector for Dynatrace:
 - Developed a collector app to extract metrics and metadata from the SAP HANA database into Dynatrace.
 - Collaborated with architects to design and implement the SAP HANA Collector on the OpenTelemetry Collector using Python and SQL, ensuring data acquisition and integration with Dynatrace.
 - Enabled real-time data visualization and analysis by presenting collected data in a Dynatrace dashboard.
- Migration from AWS CloudFormation to Terraform:
 - Designed and implemented Terraform scripts to replace existing CloudFormation definitions.
 - Ensured the scripts enabled repeatable, error-free deployments, emphasizing modular and reusable code.
 - Enabled agile, scalable, and multi-cloud-ready environment, thereby boosting efficiency.
- Designed and improved various Jenkins pipelines:
 - Developed pipelines for configuration, testing, and applications deployment.
 - Scheduled executions at set intervals with outcome alerts to relevant channels.
 - Improved productivity and efficiency, ensuring delivery of quality results.
- Improved multiple Kibana dashboards:
 - Worked to refine various dashboards in Kibana, focusing on their enhancement for better user experience..
 - Assessed current dashboards for possible improvements, aiming to boost overall usability.
 - Increased alert efficiency and response times, significantly boosting overall effectiveness.
- Conducted <u>on-call duties</u>:
 - Provided immediate support for critical incidents, ensuring minimal downtime.
 - Troubleshoot and resolve issues across various systems, maintaining service reliability.
 - Streamlined incident communication for faster team response.

<u>Infor</u> | Software Engineer

Sep 2020 - Jul 2022

- Creation of a python CLI to upgrade deployment workflows:
 - Designed and implemented a Python-based CLI utility. This tool's focus was to manage and automatically generate deployment workflows, acting as an additional layer to an existing internal deployment tool.
 - Integrated packaging and updating processes via GitLab CI, facilitating direct building and publishing of the project artifact to an AWS S3 bucket.
 - Improved the lifecycle of all deployed products, by enabling a much faster and more efficient deployment.

- Designed and Implemented the automation to deploy a new multi-tier project on a cloud-based infrastructure:
 - Implemented automation scripts to deploy a new multi-tier project on a cloud-based infrastructure.
 - Automated the deployment of a 3-tier application on AWS with Terraform. Rolled out SaltStack scripts that
 efficiently configured the remotely created compute nodes.
 - The successful delivery of the project brought about complete deployment automation and provided smooth cross-account access, significantly enhancing our overall operational efficiency.

Integration Objects | Software Development Engineer

Feb 2020 - Jul 2020

- Designed and implemented a monitoring module for a distributed and large-scale industrial IoT platform:
 - Needed to improve monitoring and management of a large-scale IoT platform.
 - Developed a microservice to collect and manage remotely exposed metrics and data using scheduled jobs, and deployed it on a multi-server Kubernetes cluster.
 - Enhanced platform monitoring and data insights, improving issue detection and resolution times.

SELECTED INDIVIDUAL PROJECT (More projects available on my portfolio website)

EagleEye Jul 2019 - Sep 2019

- Real-Time Reputation Tracking on X (formerly Twitter)
 - Needed a tool to track and analyze public perception of specific topics in real time during major events.
 - Built a microservice-based platform in Python, integrating sentiment analysis and stream processing. Used Kafka as a message broker, Elasticsearch for fast querying, and deployed on AWS EC2 with Kibana for real-time dashboards.
 - During the 2019 Tunisian Presidential Election, the tool achieved 87% accuracy in predicting candidate outcomes based on real-time reputation trends.

Lemhaf *Mar 2021 - Jul 2023*

- Connective Services Sharing Online Platform
 - Identified the need for a digital platform to efficiently connect daily service seekers with local providers.
 - Designed and implemented a MERN full-stack web platform using a three-tier architecture, delivering a responsive and user-friendly interface across devices.
 - Improved accessibility and efficiency for both users and providers, streamlining local service discovery and enabling stronger community engagement.

EDUCATION

Paris Descartes University, Paris, France	Sep 2019 - Oct 2020
M.Res, Computer Science	
Master of research degree M2, Computer Science with a major in Signal Processing.	
National Engineering School of Tunis, Tunis, Tunisia	Sep 2017 - Jul 2020
M.Eng.CS, Software Engineering	
Master's degree in Computer Science with a major in Software Engineering.	
Preparatory Institute El Manar, Tunis, Tunisia	Sep 2015 - Jun 2017
B.Sc, Mathematics and Physics	
CERTIFICATIONS	

CERTIFICATIONS

AWS Certified Solutions Architect – Associate	Credentials	Feb 2023 - Feb 2026
AWS Certified Developer – Associate	Credentials	Dec 2021 - Dec 2024