MOHAMED ZOUARI
Software Engineer

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SUMMARY

I am a Software Engineer with 3 years of experience, working effectively in dynamic multi-national enterprise environments. I am 2x AWS Certified {SAA-C03, DVA-C01} and am passionate about reshaping cloud software development experiences. I have contributed to designing, maintaining, testing, and implementing large-scale and distributed cloud-based projects.

TECHNICAL SKILLS

Programming Languages:	Python, Java, Javascript, C/C++.
Cloud Providers:	AWS.
Databases:	SQL, MongoDB, PostgresQL, Oracle.
Operating Systems:	Unix/Linux, macOS.
Automation Tools:	Terraform, Jenkins, SaltStack, Ansible, Vagrant, Gitlab CI/CD.
Monitoring and visualization applications:	Dynatrace, Kibana.

EXPERIENCE

SAP   *Jul 2022 – Present*
Software Development Engineer

- Created a script that replicates Dynatrace environments across regions:
  - Designed and implemented a python script to automate the replication of Dynatrace environments across regions. Tested and validated the script to ensure consistent and reliable deployment.
  - **Results:** Reduced manual effort and increased the speed and reliability of environment replication.
- Implemented a data collector app that collects data from SAP HANA database and feeds it to Dynatrace for monitoring and created a dashboard on Dynatrace that consumes the collector data:
  - Worked with a team to design and implement a data collector app using Python and SQL.
  - Tested and validated the app, and collaborated with stakeholders to ensure data accuracy and relevance.
  - Implemented a Dynatrace dashboard that monitor the collected data.
  - **Results:** Provided valuable insights into system performance and increased the effectiveness of monitoring.
- Designed and implemented a Jenkins Job to schedule regular refresh of SAP HANA monitoring collector apps:
  - Tested and validated the process to ensure reliable and consistent execution.
  - **Results:** Improved monitoring capabilities and increased the efficiency of monitoring processes.
- Enhanced several dashboards in Kibana:
  - Identified areas for improvement in existing dashboards and implemented changes to increase usability.
  - Developed new dashboards to provide actionable insights into key performance metrics.
  - **Results:** Improved overall visibility into system performance and provided key insights to stakeholders.
- Managed and enhanced Kibana monitors linked to third-party apps:
  - Reviewed existing monitors and updated as necessary to ensure alerts were actionable and relevant.
  - Created new monitors to track additional metrics and improve system monitoring.
  - **Results:** Increased the effectiveness of alerting and response to potential issues.

Infor   *Sep 2020 – Jul 2022*
Software Development Engineer

- Contributed to the design and the implementation of a (Python) CLI utility to manage and generate automatically the deployment workflows as a layer on top of an internal deployment tool:
  - Designed the new concept of workflow as collection of deployments and test actions associated with a specific AWS deployment environment.
  - Implemented the CLI generation tool to use generic config files to create workflows in a customizable way.
  - Added package process using a GitLab CI, to build and publish the project built artifact to an AWS S3 bucket.
  - Created an update feature to get the latest shared version from the S3 bucket and promote it from CLI.
  - **Results:** Improved the lifecycle of all the deployed products. The team reached a more efficient working cycle.

- Contributed to the enhancement and the creation of new features for internal platform that manages cloud environments :
  - Updated the API layer (Python Pyramid) and the task processing side (Celery, RabbitMQ, SQLAlchemy).
- Designed and Implemented the automation to deploy a new multi-tier project on a cloud-based infrastructure on top of the internal deployment tool :
  - Implemented SaltStack scripts to fully configure the remotely created compute nodes (CloudFormation).
- Reduced the deployment time by updating the used environments and automations :
  - Packaged the API codebase and the UI code and added the package process using a GitLab CI.
  - Enhanced the automation (Salt) scripts to configure the freshly created cloud compute nodes (EC2 nodes).
  - **Results:** Reduced the deployment time by 40%.
- Designed a new release of an internal platform for a multi-environment support and cross-account availability :
  - Designed and implemented an integration environment, refreshed from CI pipeline stages to redeploy the application servers and trigger a lambda function that refreshes the load balancer target groups.
  - Designed and implemented a temporary feature testing environment to enable developer testing newly implemented features from a code branch.
  - Exposed the platform via a custom endpoint service and AWS PrivateLink to other VPCs in external accounts.
  - **Results:** Reduced the deployment time by 100% (Fully automated), and enabled cross accounts access.

Integration Objects   *Feb 2020 – Jul 2020*
Software Development Engineering Intern
- Designed and implemented a monitoring module for a distributed and large-scale industrial IoT platform:
  - Implemented a microservice to collect and manage remote exposed metrics, data, using scheduled jobs.

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

Lemhaf   *Mar 2021 - Present*
A services sharing online platform
- Created a full-stack web platform, to allow users find out daily services they need and to allow service providers to connect with the community :
  - Designed, and implemented a three-tier architecture for a cross-platform online sharing website.
  - Implemented a responsive front-end UI (ReactJS, Ant Design, Material Design).
  - Deployed a back-end server (NodeJS, ExpressJs), connected with a non relational database (MongoDB).
  - **Results:** Actually working on an upgrade to add a service recommendation engine using existing data.

EDUCATION

National Engineering School of Tunis, Tunis, Tunisia	Sep 2017 - Jul 2020
M.Eng.CS, Software Engineering	
Computer Science engineering degree with a major in Software Engineering.	
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.	
Preparatory Institute El Manar, Tunis, Tunisia	Sep 2015 - Jun 2017
B.Sc, Mathematics and Physics	
Ranked among the top 5% nationwide in the national exam.	

CERTIFICATIONS

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

EXTERNAL ACTIVITIES

IEEE	*Active Member*	*Sep 2017 - Present*
ENIT Arts club	*Chairman of the board, Violinist*	*Sep 2017 - 2020*

- Led a music band of engineering students as the violinist of the group, to participate in national musical events.