MOHAMED ZOUARI

Software Engineer

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SUMMARY

Forward-thinking Software Engineer with experience, working effectively in a dynamic multi-national enterprise environment.
An 2x AWS Certified {SAA-C03, DVA-C01}. I am currently trying to reshape some Cloud Software Development experiences, contributing 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, Windows.
Automation Tools:	Terraform, Jenkins, SaltStack, Ansible, Vagrant, Gitlab CI/CD
Software Design & Methodologies:	Web Services, REST, MVC, MVP, Testing, Agile, KANBAN, SCRUM, TDD.

EXPERIENCE

SAP

Jul 2022 – Present

Software Development Engineer

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 in 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 PROJECTS (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 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).
  - Used a distributed storage cloud solution to host media files.
  - Implemented an authentication and authorization component with email verification.
  - **Results:** Actually Running, with (860 users, and 1540 shared services).
  - *Actually working on an upgrade by adding a service recommendation engine based on services rating and user previous activities..*

EagleEye | Github Repo | Demo *April 2019*

A real-time reputation monitoring platform

- Designed and implemented a real time solution for reputation tracking and monitoring on (Twitter) :
  - Implemented some back-end microservices using (Spring Cloud).
  - Implemented a sentiment analysis microservice (Python).
  - Implemented a stream processing module using Kafka as a message broker.
  - Integrated Elasticsearch to process the streams for real time monitoring on a dashboard (Kibana).
  - **Results:** Deployed the platform on AWS and tested it 3h before Tunisian Presidential Election results announcements to get a comparison of the reputation of the two candidates near the real results.

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 *Sep 2017 - Present*

Active Member

ENIT Arts club *Sep 2017 - 2020*

Chairman of the board, Violinist

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