Khaled hadj ali

License degree in computer science and multimedia

18 rue séverine villeurbanne

+33621975305
Khaledhadjali1@gmail.com
Linkedin : https://www.linkedin.com/in/khaled-h-346808aa/
Medium: https://medium.com/@khaledhadjali1

Career Objective

Seeking a position that will allow me to practice my current programming skills. Especially using Python . Also, to use and enlarge my knowledge in domains such as Django , Odoo, computer vision, Artificial Intelligent, machine learning, and web applications .

Publications

Kubernetes :
https://medium.com/norma-dev/get-solid-hands-on-experience-with-kubernetes-and-be-able-to-deploy-any-application-into-production-a2d8556a6649

https://medium.com/norma-dev/get-solid-hands-on-experience-with-kubernetes-and-be-able-to-deploy-any-application-into-production-24fd13f987a4

FastAPI:
https://medium.com/@khaledhadjali1/utilizing-multiple-middleware-in-fastapi-with-docker-b3fabf8cf23b

Networking:
https://medium.com/@khaledhadjali1/how-to-migrate-from-dockerd-to-containerd-safely-12b89a8d1613
https://medium.com/norma-dev/benchmarking-containerd-vs-dockerd-performance-efficiency-and-scalability-64c9043924b1

Technical skills

OS : WINDOWS, LINUX, MAC

Languages : PYTHON, JAVASCRIPT, BASH, RUST, GOLANG, HTML, CSS , SQL, Shell, XML

Frameworks : Django, FastAPI, FLUTTER, REACT.JS, WEB SERVICES (SOAP, REST), GRPC

Intégration continue : Gitlab, Github, Sonarqube, k8s, CodeCov.

SGBD : MYSQL, MongoDB, Postgresql, SQLite

Cloud : AWS, GCP, DIGITAL OCEAN

Tools : GIT, DOCKER, APACHE AIRFLOW, REDIS, KAFKA, SVN, ECLIPSE, JENKINS, SONAR, CHECKSTYLE, JIRA, PYTEST, FIREBASE, HAYSTACK, NGINX

Pratiques : AGILE (SCRUM, KANBAN), DESIGN PATTERNS, TDD, BDD, PAIR PROGRAMMING

Architectures : MICROSERVICES, Event Driven, Monolith

Professional experience and academic projects

august 2024- **Developer & DevOps Engineer .**
- present **Company : Orange**

Developed a network provisioning component enabling Orange clients to allocate network resources and deploy applications securely using an on-premises solution based on Kubernetes or Docker Swarm.
- Network Allocation Enhancement: Improved network allocation processes to ensure efficient and dynamic distribution of network resources based on client needs.
- Incident Detection: Implemented robust incident detection mechanisms to identify and respond to network and deployment issues promptly, ensuring high availability and reliability.
- Unit Testing Development: Developed and integrated comprehensive unit tests to ensure code quality, reliability, and maintainability, facilitating seamless deployment and scaling.
- Deployment Architecture: Assisted in designing the deployment architecture to support scalable and resilient application deployments within client environments.
- Collaboration: Worked closely with team members to integrate the network provisioning component with existing systems, ensuring seamless functionality and user experience.
- Documentation: Created detailed documentation for the network provisioning component, including setup guides, operational procedures, and troubleshooting manuals.

Tools: Python, Git, py-test, Algorithms, Data Analytics, Gitlab, pydantic, data mocking, API, pandas, , OOP, SOLID, Fortigate, IPAM, SANT, Firewall.

Janvier 2021- **DevOps / Tech lead.**
july 2024 **Company : Norma**
Client: Valueco

- Designed and implemented the deployment architecture, ensuring scalability and security of the platform.
- Managed and maintained infrastructure on Google Cloud Platform (GCP), utilizing Google Kubernetes Engine (GKE) for container orchestration.
- Configured monitoring and alerting systems using Prometheus and Grafana, providing real-time insights into system performance.
- Developed and deployed CI/CD pipelines on GitLab .
- Collaborated with cross-functional teams to integrate new features seamlessly into the production environment.
- Ensured platform security by implementing best practices and conducting regular security audits.

Tools: Python,, JAva, Git, redis , Make, K8S , npm, React native, coverage, docker-compose, linting , pre-commit, data mocking, react js, API, DockerHub, K6, hey .

Product Manager / Product Owner/ Tech lead.
Company : Norma
Product: Livrily

- Project Leadership: Spearheaded the development of Livrili, a mobile platform enabling small retailers to connect, place orders with live stock updates, and streamline operations.
- Client Engagement: Acted as the primary liaison between clients (small shop owners and wholesalers) and the development team, ensuring clear communication of requirements and feedback.
- Product Roadmap Development: Created and maintained the product roadmap, prioritizing features based on business value, client feedback, and technical feasibility.
- Stakeholder Management: Coordinated with cross-functional teams, including developers, designers, and marketing, to ensure alignment and timely delivery of project milestones.
- System development: Developing Backend web api using Django that communicates with react native application , Develop new features, Unit and integ tests , assist the team .
Add custom backend(django , fastapi and postgres) prometheus metrics for development .
develop application middleware to enhance application security and gather logs .
Setting CI/CD on github to ensure tests running successfully with py-test, coverage publishing, and code formatting .
Setting CD for a react native mobile app on firebase with fastlane .

Tools: Python,, Docker, Git, redis , py-test,Make, async-io ,,Django, Algorithms , Data Analytics, GitHub ,pydantic, npm, React native,, coverage, docker-compose, linting , pre-commit, data mocking, react js, API, DockerHub, Firebase, Fastlane, ruby.
Fullstack Dev & DevOps .
Company : Norma

Tech lead at NotionEdge:

Developing a new mobile application for Coca-Cola company to manage deliveries .
onboard a new developer in the project .
Manage a team of 5 developers (3 backend and 2 front end developer) .
help team members to enhance their careers.
Understand business requirements and prepare tickets and sprints .
Developing Backend web api using FastAPI that communicates with different SAP systems and a react native application .
Develop new features .
Create unit tests .
Add custom backend(django , fastapi and postgres) prometheus metrics for development .
develop application middleware to enhance application security and gather logs .
Prepare a work environment on Cloud Foundry test, pre-prod and prod.
Setting CI/CD on github to ensure tests running successfully with py-test, coverage publishing, and code formatting, with auto deploy the app on sap-cockpit.
Setting CD for a react native mobile app on firebase with fastlane .
Develop mobile screens with react native .

Tools: Python,, Docker, Git, redis , FastAPI, py-test,Make, async-io ,,Cloud Foundry, Algorithms , Data Analytics, GitHub , Avaza ,pydantic, cf, SAP, SAP-COCKPIT,XML, npm, React native, SOAP, IDP,, coverage, docker-compose, linting , pre-commit, data mocking, react js, API, DockerHub, Firebase, Fastlane, ruby.

Tradias(trading platform) : https://www.tradias.de/
14 months - Creation of a new application: B2B trading platform - Tradias

Development from A to Z of a B2B crypto-currency trading platform.
Development from A to Z of a competitive automated trading system.
Design and build 20+ high performance distributed microservices based on events .
Interfacing with more than 10 different providers (Kraken, Binance, B2C2, etc.)
Management of a complex data layer: postgreSQL for persistent data, Dynamodb, mongodb and Redis for caching)
GRPC endpoint development, socket endpoint processing,
Working with pub/sub architecture
Developing an API using fastapi
Creation of unit tests and integration tests
Bash scripting, optimization of the build time of docker images, deployment on a registry
Code Review for the backend team.
onboard new developers on the team .
manage a team of backend developers and assist them while sprints by insuring applying best practice and pushing them to get the best result .
Preparing clean infrastructure on prox-mox and setting gitlab-ce, jenkins and nas server .

RESULTS: Entry into service of a first version of the application after 9 months of project - 65% of positive feedback from end users
Hard time: supporting a new developer on the project while maintaining a speed of important development and solving new incoming problems .

Tools: Python,, Docker, Git, Postgres , sqlite, pgadmin, ,bash scripting ., redis , grpc , websocket, FastAPI, pytest, dynamodb, alembic, sqlalchemy, pynamodb, Make, golang, asyncio , aioredis, AWS, Algorithms , Data Analytics, Protocol Buffers , GitHub , Jira , Confluence, pydantic, Redis .

Yvee : https://app.yvee.io/
New application: Client Startup Yvee - Recruitment platform Responsible for the mobile component of the service

Development of mobile screens with flutter.
Work on firebase as backend. Establishment of devops pipelines for tests and deployments on firebase, play store and app store using the fastlane tool.
Creating a firebase function
Deployment management on Play Store

RESULTS: Entry into service of a first version of the application after 3 months.
Hard time: This was my first project as a mobile flutter developer.

Tools: flutter , dart , firebase , Git , CI/CD , Fastlane , ruby , play store.

D-namix : https://www.d-namix.io/
New application: Client Startup D-namix

Flutter mobile application that aims to block specific content .
Mobile screens development with flutter.
setting up the backend with django using the django rest framework .
Set-up devops pipelines for testing and deploying on firebase , play store and app store using fastlane tool .
Tools: Git, bash scripting, fastlane ,Flutter., Algorithms ,GitHub , Jira , Slack.

Theolex : https://www.theolex.io/

New application: Theolex Client - legal search engine In partnership with the CTO of Theolex .
Tech lead and backend developer
Backend development and Rest API set-up (Django, Haystak, FastAPI).
Database modeling of data .
Database migration to postgres and cloud backup setup config with google buckets.
creating data migration scripts to fix data in prod .
Building CI/CD process usingDocker and Github Action service.
create unit tests .
Development of a new airflow project to collect data from source using scraping, clean data and store them into database and store file in google buckets , use saved data to apply some processing task to extract data from stored files on buckets and save the result in the database.
Create an isolated environment for production and testing .
Setting up a vault solution using docker to manage organization passwords .

RESULTS: Entry into service of a first version of the application after 3 months
Hard times: Implementation of the general architecture of the airflow project.

Tools: Python, Django, Docker, Haystack, Git, Postgres, sqlite, pgadmin, Apache airflow, bash scripting, RestAPI, Flutter., redis, pytest, dynamodb, alembic, sqlalchemy,, Make, GCI , cloud composer ,S3 Buckets .

Tournament-organizer : https://martial-web-ui.web.app/

New App: Automatic Tournament Organization: Responsible for the backend within a team of 3 people

A web platform that aims to create automated tournaments
Design of the general architecture of the solution
Database modeling
Developing an API with Django
Unit tests and integration tests
Code Review

RESULTS: Entry into service of a first version of the application after 3 months
Hard time: This was my first project as a developer and team leader and responsible for preparation of requirements and tickets

Tools: Git, bash scripting, Django, Algorithms, GitHub, Data structure, Trello, Rest API, Reactjs, Make , Digitalocean, Amazon.

film.sa : film.sa
migrate a php , mysql project to a django postgres .
Developing new features on a django exist project .
Bug fixing .
Data modeling , data migration .

May 2020- Dec-202 0	**Python developer .** **Company : Sagemcom** **SAGEMCOM production management follow-up and monitoring application with its customers** **Within an Agile Kanban team of 8 people (1 ScM, 1 team lead, 6 developers):**

Tasks :
Exchanges with the industry team to qualify needs
Responsible for the Virtualization of the development and test environment
Write dags on airflow .

Wrote unit tests on the Apache airflow framework
Preparation of a development and production environment with docker
Fixed bugs in a production monitoring system
Analysis and optimization of code quality and execution time
Creation of a web service using FastAPI

RESULTS: Very few bugs reported after commissioning in production
Hard time: development time is very short because the system is in production

Tools : Python, Docker, Git, SVN, Postgres, sqlite, pgadmin, redis, Kafka, alembic, Apache airflow, bash scripting, FastAPI, RestAPI, celery.

23 Mars-February 2020 **Python / Django developer at Neopolis**

Development of a web platform for a French insurance company 'TRINITA'. Development of insurance web applications that solve several problems in the insurance domain and integration of REST API architecture layer by communicating with 3 external software.

Within a team of 20 people (1 SM, 1 PO, 1 tech lead (Sébastien Chazallet) and 1 team was splitted between France and Tunisia)

Integration of the current project
Proposal of the architecture, validation with the team:
   o Installation of Docker images
   o Setting up a Redis cache
Participation in front and back developments
Compliance with good development practices: unit tests, code coverage rate
Ensure the good practice of TDD
Writing of a complete user manual
Creation of communication web services with third parties (banks, brokerage, and insurers)

RESULTS: A large project lasts more than 3 years.
Hard time: Challenge of integrating a project already started 2 years ago, with high complexity and high quality standards and high customer expectations

Tools : Python , Django , celery , Git , Docker,Agile,Jira

Project CV Recommended Realization of a prototype in autonomy over a period of one month

Responsible for setting up the architecture
Development of web applications aimed at recommending CVs to recruiters certain search characteristics
 Analysis of the problem, designed the general architecture of the solution
Prepared the environment with Docker and implemented the solution.
Creation of the web service
Enhancing image quality using IA algo in c#, developing CNN for image optimization .
making profile test between c# and python for IA algo's .

RESULTS: the prototype made it possible to launch projects with customers
HIGHLIGHT: A role to lead the study and analysis of a project from start to finish

Tools: Python, Django, Vanilla.js, HTML, CSS, JQuery, Ajax, Git, Docker, pytesseract, pandas, machine learning, celery, Gitlab, REST API, NLP (Natural Language Processing), c#

Company :CNC EXPERTS

September-December 2018

Project 1: Responsible for managing and developing a responsible Odoo platform for data collection and analysis for the European Union in Tunisia to help the country manage the future jobs Within a team of 3 people: a BA and 2 developers.

Proposal of the architecture, validation with the team.

Implementation of the solution.

Develop new modules in odoo in python and configuration and development evolution on existing modules Documentation .

RESULTS: Be in production in 2 months

Hard time: being a cloud manager, servers are very difficult, working with startups requires a lot of effort .

Tools: Odoo, Python, html, bootstrap, backbone.js, digital ocean .

Project 2: Development and deployment of an ERP system for a company located in the Emirates United Arabs who combined wordpress in front-end and Odoo in back-end to run the business. In pairs .

Preparation of the technical stack.

Preparation of the Digital Ocean cloud infrastructure .

Develop new odoo modules in python and configuration and development evolution on existing modules .

Tools: Python, Odoo 11/12, Digital Ocean, Wordpress, G suite, virtual-min.

September 2018

Hand sign recognition 1.1 :

We have updated the hand sign recognition app with automatic hand tracking , deep learning model using a large data set .

Tools : Python , Keras ,Opencv

Django developer :

We have adapted and developed a html5 and bootstrap 4 to be suitable as a django application for a cleaning company located in France**.**
Tools : Python , django ,SQlite3 , Bootstrap , html , css

Mars-June 2017

Graduation Project (hand sign recognition 1.0)

I have created an application that is able to classify the basic alphabets of the American sign language using artificial neural networks.

And that application is divided into three main parts: Skin color detection, Hand tracking and gesture hand recognition.
I have used several techniques in every part but the interesting part is the gesture hand recognition. I have used the Convolutional neural network .

Tools: Python , Opencv , Tensorflow

Education

2014-2017 **License degree, ISIMG (Gabes)**
License degree in computer science and multimedia .

2013 **Tunisian baccalaureate diploma in Computer science .**

Training and certifications

Professional training:

- Cisco CCNA Routing and Switching

- Fortinet

- Computer troubleshooting

- Arduino

- Linux

Self study courses:

- Python, c, Java, batch, shell, Django ,RestAPI , Odoo

- Machine learning Algorithms (CNN,SVM,K- nears……etc)

- OpenCV, Tensorflow, keras, Scikit-learn

Language

Arabic : Mother tongue   **English**: Intermediate
French : Fluent   **German**: Basics

Additional activities

Sport : Football , chess and Ping pong