Tarek Berkane

Bouira Algeria

"Simplicity is deceptively complicated."

Personal Profile

A University of Bouira graduate student who is enrolled in the math and computer science program. Dedicated to software engineering, and specialising in machine learning, algorithms and full-stack web development. Searching mostly for Machine Learning, Data Engineer, and Python Development positions.

Education

University of Bouira

MSc in Informaion systems and software engineering

- Graduated with A class
- Courses: There are three semesters educative:
 - First Semester: Networking, Artificial Intelligence, Advanced Algorithmics and complexity, Advanced data structures, Operating system, Computer architecture, Design pattern, Cloud Computing
 - Second Semester: Software engineering, Networking, Infographics, Artificial Intelligence, Cyber Criminality, Distributed systems.
 - Third Semester: System on chip, Ad hoc networks, Deep learning, Optimisation, Big data, Information retrieval.
 - Last Semester: End of Cycle Project: Startup project: building a platform (web and mobile application) for a hotelier system for Algerian hotels for online booking with marketing norms (Yield Management and AIDA) and recommendation system based on IA

University of Bouira

BTech in Informaion systems and software engineering

- Graduated with A class
- End of Cycle Project: Build Hadith search engine

Conference

CONFERENCE PROCEEDINGS

Platform (web and mobile application) for a hotelier system

Tarek Berkane, Abdelkader Benaissi

Forum elite and national competencies, 2023, Algiers, Algeria

Adaptive Consistency in Microservices using Machine Learning: Personalizing Consistency for Improved Performance, Scalability and Availability.

Tarek Berkane, Abdelkader Benaissi, Zohra Mahfoud

The First Workshop on Artificial Intelligence (WAI'23), 2023, Bouira, Algeria

Work Experience

University of Bouira

Internship, System Administrator

- Server Management: Installing, configuring, and maintaining servers, both physical and virtual, to ensure reliable and uninterrupted operation.
- · Network Administration: Managing network configurations, ensuring connectivity, and troubleshooting network-related issues
- · Security: Implementing security measures to protect servers and systems from unauthorized access, data breaches, and cyber threats.

Faculty of Science and Applied Sciences

Project Implementer

- · Collaborated with my supervising professor and partner to develop a Search engine.
- Collect the necessary information
- implement and test our application
- Technical Skills: Elasticsearch, Django, DRF, Flutter.
- Soft Skills: Teamwork, Time Management, Communication, Presentation skills.

Bouira, Algeria

February 2023 - Mai 2023

Bouira, Algeria

April 2021 - Mai 2021

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Bouira, ALG Sept 2023

Bouira, ALG

Sept 2021

NOVEMBER 20, 2023

Competitions

Kodikos Competition (third place)	ESI Sidi Bel Abbès, Algeric
Segmenta, Software solution company	Nov 2023
 Third place winner Problem: find solution for a company problem> Slution: Establishing a software solutions company specializing in providing services to businesses, we offer a solutions: paperless systems, business analytics, customer segmentation, and sales forecasting. thecnology: Django, Flutter, Ml 	suite of four distinct software
Smart City Competition (winner)	M'Sila, Algeri
Optimo, Route path optimization	Jun 202
 First place winner Problem: determine the most efficient routes to minimize travel time, fuel costs, and overall operational expens Slution: Creating a service that calculates the shortest path and optimizes routes based on requirements. thecnology: Django, DRF, Flutter, Leaflet, Google map api AI (Artificial Intelligence) techniques to tackle the Traveling Salesman Problem (TSP) and optimize routes 	es.
Dz english entrepreneurship camp (winner)	Bouira, Algeria
Optimo, Route path optimization	Mai 202
 First place winner This challenge was proposed by Biopharm determine the most efficient routes to minimize travel time, fuel costs, and overall operational expenses. 	
Coding 3.6 (winner)	Batna, Algeria
Optimo, Route path optimization	Dec 202.
 First place winner Problem: Searching for a solution to guide new students at the university Solution: A social networking platform for students with groups to share their questions and experiences thecnology: Django, DRF, Flutter, Elasticsearch 	
Chargily (winner)	Bouira, Algeria
Chargily library for Django and pythonBuild library to integrate chargily api with django and python	July 202.
Projects	
CodingDz blog	
website	202

- Inspired from ghosts theme
- Support SEO, real time analytic
- Technology used: Wagtail, Django, Redis, Javascript, Tabler(bootstrap)

CodingDz Courses

website

- Inspired harmash.com
- Arabic website to provide programming courses.
- Support SEO, Real time analytic, Google analytic, third-party commenting platform (Disqus)
- Technology used: Wagtail, Django, Redis, Javascript, Tabler(bootstrap)

University document

website2022• A platform to store and search for Previous years exams.• Technology used: Wagtail, Django, Redis, Javascript, Tailwind, DropboxMoadaly

Mobile application
application that allow you to calculate your pass marks. The app is for computer science student
Technology used: Flutter

• More than 10K Downloads

Mishkal

Mobile application

- application for forming Arabic texts
- Technology used: Flutter
- More than 50K Downloads

2022

2020-2023

Qutrub Mobile application 2022 · Qatrub website for the conjugation of Arabic verbs, Technology used: Flask **Chargily library** Python library 2022 · Integration of chargily api for Django and Python • Technology used: Django, Python **Elmouchir scraper** Scraper 2022 · Scraper built to extract enterprise information from elmouchir website • Technology used: Scrapy **Researchgate scraper** Scraper 2022 • A scraper designed to extract statistics and numbers of research papers contributed by professors at the University of Bouira • Technology used: Scrapy, Playwright, **Online certificates Fundamentals of Deep Learning** NVIDIA 2022 • refers to the foundational concepts, theories, and techniques that are essential for understanding and working with deep learning, **DevOps on AWS** Coursera 2023 • AWS Cloud Technical Essentials · DevOps on AWS: Code, Build, and Test • DevOps on AWS: Release and Deploy • DevOps on AWS: Operate and Monitor **Back-End Development** Coursera 2023 • Django web framework / APIs · Introduction to Databases for Back-End Development

The Full Stack

Languages	Python, C, Java, HTML/CSS, JavaScript, Dart.
Frameworks	Django, DRF, Wagtail, Flask, FastAPI, Scrapy, Flutter.
Databeses and Search engines	Mysql, Sqlite, Redis, Elasticsearch.
Other tools	Vscode, postman, android studio, pycharm.
Miscellaneous	Linux, Docker, Shell (Bash), ੴEX(Overleaf), Machine learning, Deep learning, Microsoft Office.
Soft Skills	Time Management, Teamwork, Problem-solving, Documentation and Engaging Presentation.
Software Architecture	
	Service-Oriented Architecture (SOA).

• Containerization and Microservices Orchestration.

Languages_

English	Moderate.
French	Moderate.
Arabic	Native and language skilled