Rezkellah FatmaZohra

Education

Higher National School For Computer Science ESI,

Double degree: Master's in AI + State Engineer in Computer Science 09/2023 - present

Higher National School For Computer Science ESI Algiers,

Higher cycle 2019 - present

Major: Intelligent Systems & Data

rank: 3

Higher National School For Computer Science ESI Alger,

Preparatory Cycle 2019 - 2021 Rank: 13/248

Said Ait Messaoudene Secondary School, Baccalauréat

05/2019 | Draria, Algiers

Field: mathematics Grade: 18.57/20

Rank: 3rd ranked in Algeria

Languages

Arabic

native

French

C2

English

Proficient

Professional Experience

AI Intern, Ornidex

10/2023 - present | Paris

As part of my end-of-study project, I am working as an intern in AI, particularly NLP, where I will explore the potential of large language models (LLMs) in a Customer Relationship Management (CRM) context.

Data Science Intern, Mobilis Algeria

07/2022 - 10/2022 | Algiers, Algeria

Development of a mobile application powered by artificial intelligence (AI) for analyzing and extracting user-generated journal entries' sentiments and interests. These data are utilized for intelligent recommendations of various subscription services (natural language processing technologies, recommendation engines, sentiment analysis).

Projects

Awakening

10/2022 - 12/2022

Shedding light on mental health through an intelligent journaling application based on advanced NLP techniques: attention mechanisms, transformer architecture, and sophisticated deep learning models that assist in achieving the following goals: Sentiment analysis, Depression detection, Interest analysis, Art and activity recommendations.

FoodieBot

08/2023

End-to-end development of a chatbot system using Dialogflow for a food delivery service. This involves several key technical components, including Dialogflow, backend development in Python with FastAPI, interaction with a MySQL database, and various additional features.

ChatWise

08/2023

An AI-driven application that leverages advanced Natural Language Processing (NLP) techniques, data analysis algorithms, and an intuitive dashboard built on the Streamlit framework to provide users with unparalleled insights into their WhatsApp conversations.

Community detection

A sophisticated tree search algorithm enhanced with a reinforcement learning layer to tackle the complex problem of community detection. Using Monte Carlo techniques, the algorithm iteratively explores the intricate network structure, identifying cohesive groups of nodes within the network. The reinforcement learning component enables the algorithm to adapt and optimize its exploration strategy over time, dynamically adjusting to the specific characteristics of the analyzed network.

Preemptive flowshop

Our approach was based on a rigorous analysis of existing literature techniques, encompassing a wide range of heuristics, optimization algorithms, and machine learning methods. We introduced our novel hybridization, a Variable Neighborhood Search (VNS) strategy intricately integrated into a Genetic Algorithm (GA) paradigm.

Learnify game

02/2021 - 05/2021

An educational game built using Dart and Flutter, designed specifically for children. It incorporates engaging and interactive gameplay mechanics along with the integration of educational content spanning various domains.

AI Intern, Samsung Electronics

10/2022 - 12/2022

An intelligent journaling application based on advanced natural language processing (NLP) techniques, including attention mechanisms, transformer architecture, and sophisticated deep learning models that assist in performing the following tasks: sentiment analysis, depression detection, analysis of interests, and recommendations of artworks and activities as part of a new feature to be integrated into Samsung Health.

Samsung Innovation Campus graduate, *Samsung Electronics* 06/2022 - 12/2022

An opportunity to delve into deep learning techniques, machine learning, and natural language processing (NLP) through hands-on experience. The program's technical focus is evident through over 50 diverse use case projects.

Skills

Python for data science	• • • • •
Machine learning	• • • • •
Structured Query language SQL	• • • • •
Optimization techniques heuristics, metaheuristics	••••
Programming languages Java, C	• • • • •
HTML5, CSS3, JS	• • • • •
High Performance Computing (Python, MPI, OpenMP, Pthreads)	• • • • •
Soft skills	• • • • •

Awards

NYUAD hackathon for social good using quantum computing 2023, New York university of Abu dhabi 04/2023

Communication, team work, collaboration, public speaking

I had the chance to be selected among the best profiles worldwide to benefit from fully funded participation in the most prestigious hackathon at NYU University.

Global nominee, Nasa Space Apps Challenge *⊗* 10/2022

I won in the national hackathon held in Algiers and qualified for the international finals, where we had the honor of being ranked among the top 20 projects of the year 2022.

Winner at Micro_Hack first edition 2023, *Micro_club* 10/2022

First place at Fast_Hack hackathon 2021,

Google Developer Group GDG 05/2021

Organizations

Club Scientifique de l'ESI CSE, Facebook Community Manager 07/2021 - 09/2022

I was responsible for managing the club's Facebook platform, interacting with subscribers, making posts..

Club scientifique de l'ESI, Events organizer

2020 - 2022

I was involved in organizing various club events, including hackathons, conferences, and more.

Club scientifique de l'ESI,

Active member of the Communication department 2020 – 2022

I had the pleasure of leading a team of content writers responsible for posting on the club's social media platforms in English, French, and Arabic. I even earned the Quality Reviewer badge.

Club Scinetific de l'ESI, Mentor

09/2021 - 01/2022

Serving as a mentor guiding newcomers to ensure their smooth integration into our club.

Publications

Monte Carlo Tree Search for Community Detection MCTS-CD

2023

Under review

MCTS-CD poster among 5 best rewards at IndabaX South Africa

2023