

# Ghassen Fodha

## Machine learning engineer

### Coordonnées

Address: Ariana, Tunisia  
E-mail : ghassen.fodha@esprit.tn  
Phone : +21692883892  
Linkedin :  
[www.linkedin.com/in/fodha-ghassen-a64273173/](https://www.linkedin.com/in/fodha-ghassen-a64273173/)

### STUDIES AND CERTIFICATIONS

#### Studies:

#### **National engineering diploma in computer science specializing in Data Science**

[Private Higher School of Engineering and Technology, Ariana – Tunisia]  
July 2021

#### **Master in actuarial science, Co-diploma Esprit Le Mans**

Sept 2019 – July 2021

Major : Mathematics , Physics

#### **Preparatory School of Engineering Studies –IPEIM , Monastir - Tunisia**

Sept 2014 – Aug 2017

#### **National Baccalaureate Major:**

#### **Mathematics – Honors degree**

mixed high school, Mahdia –Tunisia  
June 2014

#### Certifications :

#### **Fundamentals of Deep Learning for Computer Vision introduced by NVIDIA :**

<https://courses.nvidia.com/certificate/s/7c7c6b1de40d49d8933390449976c646>

### Abstract

I am able to provide solutions to problems based on data visualization, machine learning, deep learning techniques ... applied to a large volume of data from various sources (internal and collected). I am comfortable with computers and statistics to do data analysis on various subjects. I am curious, motivated and determined in everything I do which allows me to always ensure a rigorous job.

### PRATICAL EXPERIENCE

*Sept 2021 – now | Ariana , Tunisia*

Head of Deep Learning Module • Teacher Trainer • Esprit

Conducted workshops and seminars for teachers to enhance their classroom management and teaching strategies.

- Developed and implemented professional development programs, including curriculum design and assessment techniques.
- Mentored and coached new teachers, providing valuable guidance and support for their professional growth.
- Evaluated teachers' classroom performance and provided constructive feedback to improve teaching methods.
- As a Teacher Trainer, I managed curriculum development projects, ensuring they were completed on time and within budget. I applied project management principles to design and implement training programs, demonstrating my ability to lead and deliver successful outcomes.

Subjects: Database, Advanced Learning for text and graph data, database management system , fundamentals of deep learning

Coaching: data mining projects for the fourth year engineering cycle classes, supervision of students in their final projects.

*Jan 2023 – Apr 2023 | Ariana , Tunisia*

Head of Deep Learning Module • Machine Learning engineer • Esprit

Payroll evolution study:

- payroll prediction
- factors driving wage increases

Technologies: Python, Machine Learning algorithms, time series, XGBOOST

*Feb 2022 – May 2022 | Ariana , Tunisia*

**Applications of AI for Anomaly Detection introduced by NVIDIA:**  
<https://learn.next.courses.nvidia.com/certificates/c631a56da75545bf81b49826a48cb4d0>

**Fundamentals of Accelerated Computing with CUDA C/C introduced by NVIDIA:**  
<https://learn.next.courses.nvidia.com/certificates/17e4ed17b65e46feb2f2f3be4ae71051>

**Communication techniques introduced by MEDSIRAT training.**  
**Training of Trainers introduced by MEDSIRAT training.**

**Neuro-Linguistic Programming (NLP) introduced by MEDSIRAT training.**

**Soft Skills introduced by MEDSIRAT training.**

Head of Deep Learning Module • Machine Learning engineer • Esprit

Cost monitoring system:

- Understanding and analyzing project Monitoring and Billing data Log analysis to view query information
- Determine relevant KPIs
- Build queries to perform necessary calculations
- Create and feed datasets/tables
- Build a monitoring dashboard with the necessary visualizations with PowerBI
- Study alerting tools and implement the chosen solution
- Implement a user consumption detection model

Technologies: PowerBI , ML models

*Jul 2023 – Sep 2023 | Ariana , Tunisia*  
Machine Learning engineer • Freelance

Brand Classification:

The aim is to classify products according to their correct brand through their descriptions and names. The data is scrapped from websites.

Technologies: Python, Machine Learning algorithms, NLP (natural language processing) , BERT , transformers , Logistic Regression , Tensorflow , Keras

*Fev 2021 – July 2021 | Ariana , Tunisia*  
Data Scientist Intern • Esprit

- Collection and digitization of checks
- Preprocessing of check images by removing unnecessary information such as background, stray pixels, etc.
- Automatic and intelligent localization and extraction of handwritten check information, essentially the numerical amount and the literal amount.
- Recognition of the numerical amount and the literal amount.
- Design of an ICR model to auto-correct bank checks.

Technologies: Python, Django , Tensorflow , Google Colaboratory , deep learning ( CNN , RNN ) , Computer Vision

*Fev 2020 – June 2020 | Ariana , Tunisia*  
Data Scientist Intern • Esprit

- Bonus-Malus class prediction of each new customer after a detailed study based on actual CGA data.
- Fraud detection for old and new customers.
- Bonus-malus deployment of classification models and fraud detection models.
- Sentiment analysis for car brands.

## SKILLS

Artificial Intelligence, Deep Learning, Computer Vision, Machine learning, Data Engineering, Predictive Modeling, Data Visualization, Text Mining, Natural Language Processing Mathematics, Probability, Statistics, Temporal Series, Actuarial Science , Python , R , SQL ,power BI

## LANGUAGES

Arabic: Native  
French: B2  
English: B2  
Spanish:A1