# Marwa CHABBOUH

## PHD-DATA SCIENTIST-PSM®

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# Tunis

#### in @marwa-chabbouh

### **Education**

From January 2017 PhD in Computer Science with Business to December 2021 High Institute of Management of Tunis

University of Tunis (Best Doctoral Thesis Award of ISG-Tunis,

2021)

From September MSc in Computer Science

2010 to June 2013 Faculty of Economics and Management of Sfax

University of Sfax

From September BSc in Computer Science with Business 2007 to June 2010 High Institute of Management of Tunis

**University of Tunis** 

From September Baccalaureate in Mathematics 2006 to June 2007 Ezzahrouni Secondary School

## **Publications**

Marwa Chabbouh, Slim Bechikh, Efrén Mezura-Montes, Lamjed Ben Said: "Imbalanced Multi-label Data Classificationas a Bi-level Optimization Problem: A CaseStudy in miRNA-related Diseases", Neural Computing with Applications (IF 5.102), pp. 1–19, 2023.

Marwa Chabbouh, Slim Bechikh, Chih-Cheng Hung, Lamjed Ben Said: "Multi-objective Evolution of Oblique Decision Trees for Imbalanced Data Binary Classification", Swarm and Evolutionary Computation Journal (IF 10.267), vol. 49, no. 1, pp. 1–22, 2019.

Marwa Chabbouh, Slim Bechikh, Efrén Mezura-Montes, Lamjed Ben Said: "A Review of Evolutionary Algorithms for Imbalanced DataClassification", Applied Artificial Intelligence. <u>Under revision</u>, 2023.

Marwa Chabbouh, Slim Bechikh, Efrén Mezura-Montes, Lamjed Ben Said: "Multiobjective Evolution of Non-linear Multivariate Decision Trees: dealing with Overlapping in Multi-class Imbalanced Data Classification", Journal of Heuristics. Under revision, 2023.

## **Work Experience**

From January 2023 IBM Trainer

to June 2023 High Institute of Management of Tunis University of Tunis

Course: Predictive Analytics MAster Class (IBM)

Since September

2022

Assistant Professor

High Institute of Business Administration in Gafsa University

of Gafsa

Machine Learning, Big Data, Python, Data Analysis,

Cloud Computing

### About me

Pursuing a career in applied artificial intelligence holds a strong allure for me, as it offers the opportunity to delve deeper into the realms of data science, numbers, and advanced data analysis. I possess an inherent curiosity for working in a dynamic and stimulating environment, one that fosters within collaboration passionate and innovative team. By embracing these challenges, I am ready to push myself to new heights, leveraging the power of artificial intelligence to unlock groundbreaking insights and drive transformative solutions.

#### Certifications

Microsoft Certified: Power BI Data Analyst Associate

PSM (Professional Scrum Master I)

Introduction to Programming Using Python - Microsoft

**Business Process Analyst-IBM** 

Big Data Engineer V2 - IBM

<u>Predictive Analytics Modeler -</u> IBM

<u>Cloud Application Developer -</u> <u>IBM</u>

Certificat Informatique et Internet (C2i) niveau 1

E-learning (Accenture)

### **Formations**

Advanced Machine Learning with TensorFlow on Google Cloud Platform (Coursera) IN PROGRESS

## **Work Experience**

From October

**Data Scientist** 

2021 to September Minister of Finance Tunis

2022

From May 2017 to October 2021

**Data Analyst** 

Minister of State Properties and Land Affairs of Tunisia Tunis

Since January 2017 Data Science Researcher and Member of Modelisation et Simulation group (MoS)

Strategies for Modeling and ARtificial inTelligence Laboratory

**Tunis** 

Multi-objective evolution of oblique decision trees for

imbalanced data binary classification

**Environment:** Machine Learning, JAVA, Eclipse, Decision Trees, Multi-objective Optimization, Evolutionary

Algorithms, Statistical Tests

From September 2016 to June 2017 **Assistant Professor** 

High Institute of Technological Studies of Nabeul University of

Carthage

**Course:** C Programming

From September 2015 to January 2016

Assistant Professor

High Institute of Technological Studies of Nabeul University of

Carthage

Courses: C programming, Web Development (PHP5),

From September 2014 to January 2015

Assistant Professor

High Institute of Technological Studies of Nabeul University of

Courses: C programming, Computer and Internet Certificate (C2i) Preparation, Database Management

System

From September 2014 to June 2015 Assistant Professor

Faculty of Economics and Management of Nabeul University

of Carthage

Courses: MySQL, E-Learning, IT Security - Supervision

of three BSc Student

From September 2013 to June 2015 **High School Teacher** 

**Hopes Private School Nabeul** 

**Course: Information and Communication Technologies** 

From March 2012 to May 2013

Data Science Researcher and Member of ANLP Research Group

Multimedia, InfoRmation Systems and Advanced Computing

Laboratory (MIRACL) University of Sfax

Developement of a Natural Language Processing project

for the Automatic Vocalization of Arabic Texts

Environment: Machine Learning, JAVA, Eclipse, Hidden

Marcov Chain Model, Baum-Welch Algorithm

From February 2010 to April 2010 JAVA J2EE Developer

**SWIB** Tunis

Development of a CRM module

Environment: JAVA/J2EE, Eclipse, Servlet, MVC, JDBC,

JSP, JSF, Tomcat, JBoss, MySQL

**Formations** 

Data Science Hands-On with

**Open Source Tools** (cognitiveclass.ai)

**Python Libraries for Data** 

Science (OpenClassrooms)

Computer skills

Machine Learning, Data mining, Mathematics, Statistics, , NLP,

Modeling

Data Collection, Data Preparation, Data Analysis

Statistical Analysis: SPSS - IBM

**SPSS Modeler** 

Programming: JAVA/J2EE,

Python, C

ANACONDA, Jupyter

Big Data, Hadoop, HDFS, MapReduce, Spark (IBM Watson

Studio)

Web development: HTML, Java

script, PHP, CSS, PHP5

IBM cloud (waston)

Latex, TeXnicCenter

**Soft Skills** 

Producing Data Visualizations, **Documenting, Presentation** 

**Critical Thinking, Problem** 

Solving, Working Independently

Collaboration, Verbal & Written

Communications

Languages

Arabic Native

**English Advanced** 

French Advanced

Interests

**Travel and Discover New Places** 

# **Work Experience**

From July 2009 to August 2009 PHP Developer SWIB Tunis

Development of a file-sharing website <a href="Environment">Environment</a>: HTML, JAVA, CSS, PHP