

DHIA ZOUAGHI

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DATA ANALYST

Skilled Data Analyst with almost 3 years of professional and internship experience in statistical analysis, data visualization, and machine learning using Python and TensorFlow. Experience in integrating Machine Learning models into different smart devices and IoT, primarily in the healthcare industry. Certified by IBM as a Data Science Professional with hands-on experience utilizing different technologies like R, SQL, PowerBI, and Microsoft Azure. Effective communication skills, leading to a strong collaboration with cross-functional teams presenting complex data insights to both technical and non-technical stakeholders.

Statistical Analysis • Data Visualization • Machine Learning • Database Management • Agile Methodologies

Languages: Python, R, Scala

Frameworks: Apache Hadoop, Apache Spark

Databases: SQL, MongoDB, Cassandra

SDLC: Scrum, XP, Lean Software Development, Kanban

Tools: Excel, Tableau, Power BI, Jupyter Notebooks, JIRA, SharePoint

Platforms: MacOS, Microsoft Azure, Google Colab, Kaggle, Databricks

Big Data: Hadoop, Spark

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

VITAH, Sousse, Tunisia • 02/2022 – 10/2023

Startup specializing in wearable technology.

Machine Learning Junior Developer

Integrated machine learning algorithms into wristwear.

- Developed machine learning models to analyze health data from wrist wear, utilizing Python and scikit-learn, which resulted in a 20% increase in prediction accuracy for detecting health anomalies.
- Collaborated with a cross-functional team to integrate data analysis processes into the company's existing systems, reducing data processing time by 30%.
- Presented findings and model performance to stakeholders through interactive dashboards using Tableau, leading to an increase in stakeholder engagement and informed decision-making.
- Conducted comprehensive data cleaning and preprocessing using SQL and Python, improving data quality and reliability, leading to a 40% reduction in data-related errors.
- Implemented statistical models to assess treatment efficacy, increasing the accuracy of patient outcome predictions by 20% and supporting evidence-based decision-making.
- Won National and International awards representing the startup in various expos and enhancing the company's visibility and reputation worldwide.

Technologies Used: Python, TensorFlow, Keras, Pandas, NumPy, Scikit-learn, SQL, Tableau, JIRA, Microsoft Office, JAVA

UNIVERSITY OF SHERBROOKE, Sherbrooke, Canada • 07/2021 – 01/2022

French-language university offering innovative research and educational programs.

Machine Learning Researcher

Applied machine learning in IoT to ensure that the elderly receive optimal healthcare.

- Conducted research on the integration of machine learning with IoT devices to monitor elderly health, using Python and TensorFlow, which led to a 30% improvement in early detection of health anomalies.
- Developed a WearOS Application to capture various physiological signals, such as heart rate and movement, enhancing real-time monitoring capabilities and increasing user engagement by 25%.

- Collaborated with healthcare professionals to validate model effectiveness, ensuring a 20% increase in the accuracy of health predictions and improving clinical decision-making.
- Classified sleep cycles to detect abnormal behavior of vital signs using machine learning algorithms, achieving an 80% accuracy rate in identifying potential health risks.

Technologies Used: *Python, R, TensorFlow, IoT sensors, Swift*

THINK-IT, Tunis, Tunisia • 01/2020 – 07/2020

Technology firm focused on developing sustainable and innovative tech solutions.

Full Stack Developer

Developed a learning management system for rising software engineers.

- Created user interfaces and back-end functionalities for a learning management system using Django and React, enhancing user experience and increasing user engagement by 40%.
- Provided useful data science content to enhance the quality of the learning system, resulting in a 25% increase in user satisfaction and learning outcomes.
- Debugged and optimized code to improve system performance, reducing load times by 30% and increasing overall system reliability.
- Implemented data analytics dashboards using Tableau to track user progress and system usage, leading to a 20% improvement in curriculum development and resource allocation.

Technologies Used: *React, Django, Tableau*

INTERNSHIP EXPERIENCE

DOT-IT, Sousse, Tunisia • 07/2019 – 12/2019

Technology company specializing in software development and digital solutions for various industries.

Mobile Software Developer

Contributed to a national bank mobile application.

- Conducted thorough testing and debugging, improving system stability and reducing error rates by 20%.
- Collaborated with the design team to create an intuitive user interface, enhancing user experience and boosting user retention by 25%.

Technologies Used: *Java, Kotlin, XML*

AL-HAMAD UNIVERSITY, Doha, Qatar • 01/2019 – 02/2019

Educational institution in Qatar offering diverse programs.

Mobile Developer

Developed a mental healthcare website and application to connect people suffering from anxiety to professionals anonymously.

- Created a secure and anonymous platform for mental health support using PHP and MySQL, ensuring user privacy and increasing user registrations by 50%.
- Won the award for best project in Innovation Academy competition, enhancing the project's credibility and attracting interest from potential investors.

Technologies Used: *Java, PHP, MySQL*

ACADEMIC PROJECTS

Maharishi International University (2024) Facial Expression Recognition Using Machine Learning

This project aimed to develop a machine learning model capable of recognizing facial expressions from images, enhancing real-time emotion detection capabilities. My role involved designing and training advanced convolutional neural network (CNN) models using TensorFlow and Keras to accurately classify different facial expressions. This project utilized Python, TensorFlow, Keras, OpenCV, Jupyter Notebook

Maharishi International University (2024) Sign Language Detection System

This project focused on developing a machine learning system capable of detecting and interpreting sign language gestures from video input. My role encompassed designing and training convolutional neural networks (CNNs) using

TensorFlow and Keras to recognize and classify different sign language gestures accurately. This project utilized Python, TensorFlow, Keras, OpenCV, Jupyter Notebook

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 12/2025)

Maharishi International University, Fairfield, Iowa

Key Courses: *Machine Learning, Big Data, Database Management*

Master's in business Intelligence and Data analytics

Kadir Has University, Fatih, Istanbul (08/2023)

Key Courses: *Machine Learning and its Applications to Business, Applied Statistical Methods*

Bachelor's in Software Engineering

Mediterranean Institute of Technology, Lac 2, Tunis (07/2021)

CERTIFICATIONS

IBM Data Science Professional Certificate

Analyzing and Visualizing Data with Excel