

# Mohamed E. BRIKI

Machine Learning Engineer | Data Project Lead

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[in mebriki](#) | [mebriki](#) | [mebriki.github.io](#)

Algiers, Algeria

## SUMMARY

Machine Learning Engineer with 2+ years of experience at deep-tech startups, building end-to-end ML pipelines and delivering data-driven solutions across diverse domains including healthcare and legal tech. Collaborating with cross-functional and multidisciplinary teams as well as stakeholders.

Passionate about research, continuous learning, and leveraging technology to address societal challenges responsibly.

## EXPERIENCE

### • ML Engineer & Data Project Lead

*Wessini*

*Jan 2025 – Present*

*Algiers, Algeria, Hybrid*

- Leading the development, optimization, and maintenance of a legal text extraction pipeline.
- Managing and updating a high-quality legal text database powering "[Verdikt](#)"—a legal AI assistant.

### • Machine Learning Engineer

*Wessini*

*Nov 2023 – Dec 2024*

*Algiers, Algeria, On-site*

- Designed and developed an efficient text extraction ETL pipeline incorporating text recognition, cleaning, sorting, pattern identification, and data structuring.
- Implemented a custom sorting algorithm to accurately process multi-column text and preserve original document layouts.
- Optimized the pipeline to handle both legacy, poorly scanned and native documents.
- Processed thousands of legal documents with high accuracy, enabling the creation of a robust legal text database.

### • Machine Learning Engineer

*Namla*

*Feb 2023 – Aug 2023*

*Orsay, France, Remote*

- Developed end-to-end machine learning solutions for networking, healthcare, and smart city applications.
- Trained and fine-tuned ML models (XGBoost, VGG16, LSTM, Prophet) with TensorFlow, Keras, and scikit-learn.
- Built deployable prototype ML applications using Flask and Streamlit.
- Utilized Docker and Docker Compose and YAML templates for containerization and deployment.
- Authored technical blogs on Edge Computing and AI, including "[Predictive Maintenance](#)" and "[Satellite Edge Computing \(SEC\)](#)".

### • Biomedical Engineer Intern

*CHU Mustapha*

*Mar 2017 – Apr 2017*

*Algiers, Algeria, On-site*

- Developed a Patient Record Management System (PRMS) for the Cardiac Surgery department.
- Inspected and documented operating room equipment and instruments.

## EDUCATION

### • Master's Biomedical Informatics

*University of Abou Bekr Belkaid Tlemcen*

*Sep 2017 – Nov 2020*

*Tlemcen, Algeria*

- Thesis: "Medical Images Classification Based on Deep Features Extraction Exploiting Transfer Learning" - Grade: 17.50/20 (Très Bien)

### • Bachelor's Biomedical Engineering

*University of Abou Bekr Belkaid Tlemcen*

*Sep 2014 – Jun 2017*

*Tlemcen, Algeria*

- Final Project: "Patient Record Management System (PRMS) for Cardiac Surgery Department" - Grade: 15/20 (Bien)

## PROJECTS

### • Breast Cancer Classification: Hybrid Deep Learning Approach (Master's Thesis)

*Tools: VGG16, SVM, MLP, Random Forest, INBreast dataset, NumPy, Pandas, Scikit-learn, Keras*

*Apr 2020 – Nov 2020*



- Developed a breast cancer classification model combining a fine-tuned VGG-16 CNN for feature extraction and traditional ML classifiers (SVM, MLP, Random Forest) for final prediction
- Improved upon baseline model (AUC = 0.95) by achieving AUC = 0.98 using SVM, with further performance gains using MLP and Random Forest
- Trained and evaluated the model on the INBreast dataset using Google Colab; leveraged whole-image mammogram model architecture by Li Shen

## THESIS AND PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [T.1] Briki, M.E. (2020). *Medical Images Classification Based on Deep Features Extraction Exploiting Transfer Learning*. Master's Thesis, University of Abou Bekr Belkaïd Tlemcen, Algeria. Supervised by Prof. [Settouti, N](#) and Dr. [Bechar, MEA](#).

## SKILLS

- **Machine Learning:** TensorFlow, Keras, PyTorch, Scikit-learn, Pandas, NumPy, OpenCV, Matplotlib, Plotly
- **Programming Languages:** Python, MATLAB, SQL
- **Dev Tools & Platforms:** Docker, Streamlit, Git, GitHub, VS Code, Jupyter Notebook, Google Colab, Kaggle Notebooks, Ubuntu
- **Soft Skills:** Problem-solving and creativity, Critical analysis, Team collaboration, Proactive communication, Time management and prioritization, Adaptability


## CERTIFICATIONS & TRAINING

- [AWS Machine Learning Fundamentals Nanodegree](#) from **Udacity** Aug 2024
- [AI Programming with Python Nanodegree](#) from **Udacity** Feb 2024
- [Data Science & Analytics](#) from **HP LIFE** Oct 2023
- [Applications of AI for Anomaly Detection](#) from **NVIDIA DLI** Feb 2023
- [Introduction to Machine Learning](#) from **Anaconda** Feb 2023
- [Introduction to Python Programming](#) from **Anaconda** Feb 2023
- [Introduction to SQL](#) from **Anaconda** Feb 2023
- [Google Cloud Academy](#) from **BambooGeeks** Jan – Feb 2023
- [AI for Medical Diagnosis](#) from **DeepLearning.AI** May 2022
- [Google Cloud Digital Leader Training Professional Certificate](#) from **Google Cloud** May 2022
- [TensorFlow Developer Certificate](#) from **TensorFlow** Apr 2022
- [Introduction to TensorFlow for AI, ML, and DL](#) from **DeepLearning.AI** Apr 2022
- [Google IT Support Professional Certificate](#) from **Google** Apr 2022
- [Fundamentals of Deep Learning](#) from **NVIDIA DLI** Feb 2022
- [Machine Learning Academy](#) from **BambooGeeks** Jan – Feb 2022
- [Kickstart your Career in Tech](#) from **BambooGeeks** Nov 2021
- [MENA 60 Days on Tech Challenge](#) from **Google Cloud** Nov – Dec 2021
- [IBM Machine Learning Essentials](#) from **IBM** Nov 2021

## VOLUNTEER EXPERIENCE

- **Co-Founder and Former President** Dec 2015 – Feb 2017  
[BEI Club](#)
  - Co-founded the BEI Club, a student organization focused on promoting Biomedical Engineering and Informatics
  - Organized seminars and events to enhance students' knowledge and skills in the field
  - Led regular meetings with club members to discuss potential projects and initiatives

## COMPETITIONS

- **Hult Prize OnCampus Competitor** Dec 2018  
[Hult Prize Foundation](#) 
  - Competed in the first-ever edition of the Hult Prize held in Algeria
  - Proposed a nonprofit e-learning platform aimed at strengthening Africa's educational ecosystem

## ADDITIONAL INFORMATION

**Languages:** English (Fluent, [EF SET C2](#)), French (Conversational, [TCF B2](#)), Arabic (Native)