# Siwar Taktak
M.Sc. Data Science Student

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in LinkedIn    🌐 Portfolio    ⚙ GitHub

## Profile

I am a 3rd-year **Data Science Engineering student (international class)** at ESPRIT and an **exchange student** at **Philipps-Universität Marburg**. I have built a solid foundation in machine learning and data engineering, through academic projects and hands-on work with Large Language Models and AI agents. Now I am looking for an internship where I can move from theory to practice, solving real challenges and learning what it takes to deploy AI systems that actually work.

## Professional Experience

**Summer Internship (Engineering Internship)**                                              *06/2025 – 08/2025*
*ESPRIT*                                                                                                            Tunisia

- Developed and implemented clustering algorithms in Python to form balanced and heterogeneous student groups based on GPA, skills, learning styles, and interests.
- Created and maintained backend workflows and Jupyter notebooks for data processing, algorithm testing, and performance evaluation.
- Integrated machine learning outputs with the web application, supporting gamification features to enhance student engagement and learning outcomes.

**Summer Internship (Company Immersion)**                                                    *07/2024 – 09/2024*
*Prologic*                                                                                                           Tunisia

- Analyzed and visualized data to support strategic decision-making across departments.
- Gained hands-on experience in data management, reporting, and the use of BI tools.
- Assisted in the centralization of data from multiple applications (GLPI and PMA) and helped design a dashboard to monitor key performance indicators.

**Summer Internship (Observation)**                                                             *07/2022 – 08/2022*
*Bank Of Tunisia*                                                                                                  Tunisia

- Prepared branch backup servers and automated the reinstallation of operating systems.
- Installed and configured essential software, including Microsoft Deployment Toolkit (MDT) and System Center Configuration Manager 2012 SCCM 2012.
- Performed BIOS configuration to enable operating system installation via network (PXE boot).

## Projects

**Agentic AI – Intelligent Recruitment Assistant**                                              *AI Project*
   *Technologies: Python, Flask, ReactJs, Transformers (BERT), Scikit-learn*

- Built an agentic AI system that reduces recruiter screening time by automatically ranking candidates using fine-tuned BERT models with multi-vector skill embeddings optimized via cosine similarity and triplet loss, while generating personalized feedback for rejected candidates.
- Enabled real-time interview analysis through audio transcription, sentiment classification, and non-verbal cue detection, applying decision tree ensembles and neural networks for candidate classification and evaluating performance using accuracy and F1-score.

**FoodForAll – Food Donation & Redistribution Platform**
   *Technologies: Java, Symfony, MySQL*

- Designed and developed a platform to facilitate food donations from individuals and restaurants to people in need.
- Implemented user authentication, donation management, and real-time availability tracking features.
- Focused on minimizing food waste while connecting donors with local charities and NGOs.

## Education

**Exchange Student (M.Sc. Data Science)**                                                       *10/2025 – present*
*Philipps-Universität Marburg*                                                                         Marburg, Germany

**Final Year Data Science Student**                                                                *09/2021 – present*
*ESPRIT - Private Higher School of Engineering and Technology*                                          Tunisia

**Baccalaureate in Mathematics**                                                                  *01/2017 – 07/2021*
*L'Aouina High School*                                                                                              Tunisia

## Skills

**Soft Skills:** Creativity & Initiative ● Attention to Detail ● Communication & Organization ● Problem-Solving & Solution-Oriented Mindset ● Analytical Thinking & Feedback Collection ● Educational Program Organization ● Emotional & Social Intelligence

**Technical Skills:** Microsoft 365 (Excel: Data Analysis, Pivot Tables, Formulas; PowerPoint: Visual Storytelling) ● Dashboarding & Analytics (Power BI, KPI Tracking, Data Visualization) ● Python Programming ● Machine Learning & AI (Scikit-learn, PyTorch, TensorFlow) ● Data Analysis & Feature Engineering (Pandas, Matplotlib) ● LLM & AI Agents (RAG, LangChain, Hugging Face, OpenAI APIs) ● Containerization & CI/CD (Docker, Git, GitHub, Kubernetes) ● Databases & BI Tools (MySQL, Power BI) ● Web & Content Management ● Version Control & Collaboration (Git, GitHub)

## Languages

**Languages:** Arabic (Native) ● French (C1) ● English (Advanced C2) ● German (A1) ● Italian (A2) ● Turkish (A1)

## Certificates & Trainings

- **Nvidia:** Building Transformer-Based Natural Language Processing Applications Course and Fundamentals of Deep Learning.
- **DataScientist.fr:** Introduction to Docker, Introduction to RAG with LangChain, Fundamentals of Kubernetes.
- **AWS Academy:** Certificate of Completion for AWS Academy Graduate - Cloud Foundations Training Badge.
- **National Microsoft Technologies Camp (NMTC) 4th edition 2023:** Certificate of participation, AI and Microsoft Technologies conference certificate (Mariem Kharrat), MLOPS and Autonomous Telecommunications by Orange Tunisia.
- **Coursera:** Emotional and Social Intelligence.