

Eya Taktak

Engineering Student in Advanced Technologies at ENSTAB

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Profile

Third-year **Advanced Technologies Engineering** student at ENSTA-B, passionate about developing innovative solutions in **Artificial Intelligence**. Currently seeking a **Final Year Project (PFE)** starting February 2026.

Professional Experience

- **Technical Internship – Check Amount Prediction Project** *BFI Group* [🔗](#), August – September 2025
 - Design and implementation of a complete check image processing pipeline
 - Design, training, and optimization of a CRNN model for handwritten amount recognition
 - Development of a graphical user interface using Tkinter for visualization and testing**Key Skills:** Image Processing Pipeline · Deep Learning · Computer Vision · Model Optimization
- **Worker Internship** *BFI Group* [🔗](#), July 2025
 - Hands-on exploration of various artificial intelligence models with fine-tuning applications
 - Development of an automatic detection module for check zones using the Faster R-CNN model**Key Skills:** Artificial Intelligence · Model Comparison · Fine-Tuning · Computer Vision

Education

ENSTA-B: Engineering Cycle — Advanced Technologies Student “AT” [🔗](#) *Sept 2023 – Present*
Courses: Cloud Computing, Java, Artificial Intelligence, Optimization, Numerical Analysis, Image Processing

IPEIT: Preparatory Cycle — Mathematics and Physics Student “MP” [🔗](#) *Sept 2021 – May 2023*
Courses: Analysis, Algebra, Python, SQL

Kheireddine High School, Ariana *Experimental Sciences Baccalaureate* *Sept 2020 – May 2021*

Projects

- **Energy Optimization for Buildings** [🔗](#) *Green AI Hackathon* [🔗](#), December 2025
Development of an unsupervised model to detect energy waste in office buildings and simulate optimized consumption. *Technologies:* Python, Pandas, NumPy, Scikit-learn, Matplotlib, Isolation Forest
- **Solar Panel Image Classification** [🔗](#) *Green AI Hackathon* [🔗](#), December 2025
Design of a CNN model based on ResNet18 to automatically classify solar panel conditions and enable predictive maintenance. *Technologies:* Python, PyTorch, Unsupervised Learning, Torchvision, PIL, NumPy, Pandas, Matplotlib, Data Augmentation, Transfer Learning
- **Air Quality Classification (Multimodal AI)** [🔗](#) *ENSTA-B* [🔗](#), December 2025
Deep learning model combining images and sensor data. Databricks ETL pipeline using Medallion Architecture for data cleaning, transformation, and AQI class creation. **Tools:** Python, PyTorch, Torchvision, Multimodal Architecture, Supervised Learning, Databricks, Apache Spark, Medallion Architecture, Pandas, NumPy, Scikit-learn, Kaggle, Computer Vision
- **Medical Office Platform** [🔗](#) *ENSTA-B* [🔗](#), November 2025
Intelligent web platform for medical appointment management, integrating a deep learning model for skin disease prediction from images. **Tools:** XAMPP, MySQL, Flask, HTML, CSS, Deep Learning, Transfer Learning, Computer Vision, Supervised Learning
- **Intelligent Medical Drone Delivery Platform** *ENSTA-B* [🔗](#), January 2025 – May 2025
 - **Object Detection** [🔗](#): Vision system for autonomous navigation **Tools:** Python (OpenCV, YOLO)
 - **Mobile Application** [🔗](#): User interface for medical order placement and claim management **Tools:** Flutter (Dart), Firebase

Certifications

- *Building LLM Applications With Prompt Engineering (NVIDIA)* [🔗](#)
- *Advanced Artificial Intelligence Training: From Machine Learning to Deep Learning Deployment (ENSTAB)* [🔗](#)
- *AWS Educate Machine Learning Foundations - Training Badge (AWS)* [🔗](#)
- *Get Started with Databricks for Data Engineering (Databricks)* [🔗](#)
- *Introduction to Deep Learning and Neural Networks with Keras (IBM)* [🔗](#)
- *Deep Learning with TensorFlow 2 (365 Data Science)* [🔗](#)

Skills

- **Languages:** Python, C/C++, Dart, Java, JavaScript, SQL, HTML, CSS
- **Data, AI & LLM:** Data Science, Data Analytics, Machine Learning, Deep Learning, Computer Vision, NLP, Transfer Learning, Fine-Tuning, LLM, Prompt Engineering, RAG, LangChain
- **AI Frameworks:** TensorFlow/Keras, PyTorch, Scikit-learn, NumPy, Pandas, NLTK
- **Databases & Cloud Services:** MySQL, Firebase (Authentication, Firestore)