



MELEK BENZARTI

AI STUDENT

+33 07 45 16 26 26
benzarti.melek@gmail.com

Paris

Melek Benzarti

Full projects list on :
<https://benzartimelek.github.io/Portfolio/>

SUMMARY

AI and Data Science Master's student specializing in data analysis, machine learning, and intelligent automation. Experienced in building end-to-end AI projects, from large-scale data analysis and health/stress scoring systems to predictive models and deployed ML platforms. Strong foundation in Python, statistical analysis, and applied AI systems.

EXPERIENCE

Sunwaves Medtech – Biometric Health Analytics Platform

Data Science Project / 2025

- Analyzed and structured high-dimensional Fitbit biometric data (activity, sleep, heart rate, HRV) from 33 users across multi-resolution time series (daily, hourly, minute-level).
- Led the exploratory data analysis (EDA) phase to identify physiological trends, anomalies, and feature relevance for health modeling.
- Designed and implemented the Stress Score algorithm (0–100) combining HRV, resting heart rate deviation, and activity intensity load using clinically inspired baselines and rolling windows.
- Built personalized normalization strategies (percentile-based and user-specific baselines) to handle unlabeled health data.
- Helped engineer synthetic "healthy" and "at-risk" benchmark profiles to guide feature weighting and validate score behavior.
- Contributed to the integration of the stress model into a global biometric scoring pipeline (Sleep, Heart, Activity, Stress).

Wellpack – Automation & AI project manager

04/2025 – 07/2025

- Developed and deployed a Smart SMS Campaign Platform integrating ML models for message scoring, orientation classification, and optimal send-time prediction.
- Built automated data pipelines (Python, pandas, BeautifulSoup) for SMS scraping, cleaning, and feature engineering; trained and evaluated Random Forest models to predict campaign success.
- Designed a responsive web interface (HTML/JS) and deployed a secure, browser-based internal platform with authentication for Wellpack employees.
- Contributed to AI-powered chatbots automating CRM (Pipedrive) operations and email workflows, improving internal efficiency.
- Containerized applications with Docker, managed model artifacts in a Supabase database, and deployed systems to Microsoft Azure App Services for company-wide access to ML tools and dashboards.
- Collaborated in a cross-functional team on data visualization, demos, and project defense, receiving executive approval for continued development.

SHA PEODUCTION (Ilo Hub) – Data Analyst Intern

04/2024 – 05/2024

- Collected and analyzed data on AI Governance, Risk, and Compliance (GRC) roles to support the design of adaptive learning paths.
- Built NLP pipelines to automatically analyze ISO/IEC 42001 and AI Act standards using TF-IDF, TextRank, and sentence embeddings (Universal Sentence Encoder).
- Transitioned from keyword-based to semantic sentence analysis, improving concept extraction and thematic clustering.
- Developed ontologies and knowledge graphs (XML, WebVowl) to structure regulatory concepts and visualize relationships.
- Implemented keyword extraction, filtering, and lemmatization to generate clean, interpretable regulatory features.
- Compared expert-defined vs algorithm-extracted concepts to refine feature relevance and learning content.

EDUCATION

Grande Ecole Program –Master's degree in Artificial Intelligence and Data Science

Aivancy, La Grande Ecole De L'intelligence Artificielle Et De La Data
2023-2029

KEY SKILLS

Technical & Engineering

- Python: pandas, scikit-learn, FastAPI
- SQL & JSON data management
- Machine Learning: Classification, Regression
- Feature Engineering & TF-IDF
- Web: HTML, CSS, JS, UI/UX

Automation & Cloud

- Cloud: Microsoft Azure, Supabase
- Deployment: Docker, App Services
- Automation: n8n, API integration
- AI Development: Chatbots
- Tools: Office Suite, Photoshop

Professional & Soft Skills

- Communication & Leadership
- Emotional intelligence
- Adaptability & Pressure handling
- Problem solving & Focus
- Teamwork

LANGUAGES

Arabic (Native), English (C1), and French (C1), with intermediate proficiency in German (B1) and elementary Spanish (A2)