



Anas TBER

Engineering student - Centrale Lyon

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Engineering student passionate about computer science and mathematics, with hands-on experience in application development and AI. Currently seeking my second internship during my gap year starting December 2025 or January 2026 in Data Science or AI.

Education

Centrale Lyon
General Engineering School

Lyon, France
September 2023 – April 2027

- ⦿ **Relevant courses:** Machine Learning and applications, Collaborative algorithms and applications, Probability theory and introduction to random processes, Algorithms for reasoning, Object-oriented Design and Programming, Economics, Enterprise Management

Lycée Henri Loritz

Preparatory cycle, known as **CPGE**, preparing students to enter top-ranked engineering schools in France (*Grandes Écoles*)

Nancy, France
September 2020 – June 2023

- ⦿ PCSI / PSI* streams

Experience

Tech and Operations Intern — Gentle Mates
Professional esports organization founded by Squeezie, Gotaga, and Brawks

Paris, France
April 2025 – November 2025

- ⦿ Developed an automated social media analytics dashboard using **Streamlit** and Python, implementing computer vision (**YOLO**) and Text Classification (**Regex**) to detect sponsor mentions and improve partnership ROI tracking
- ⦿ Built a cross-platform mobile app in **React Native** integrating Valorant and Fortnite **APIs** for real-time player analytics, enabling data-driven coaching decisions

Founding team member and Software Engineer — FreyIA (Early-Stage Startup)
AI-powered smart waste-sorting solution

Ecully, France
September 2023 – April 2025

Co-initiated the development of an AI-powered smart waste-sorting solution, taking it from an academic project at Centrale Lyon to an award-winning project backed by Enactus France.

- ⦿ Developed a full-stack web platform for IoT waste monitoring with real-time bin tracking and issue reporting (**HTML**, **JavaScript**, **CSS**)
- ⦿ Engineered a **PostgreSQL** database for sensor data, user accounts, and analytics with optimized query performance
- ⦿ Implemented **RESTful APIs** and **WebSockets** to integrate IoT sensors with web services for live data streaming

Personal/School Projects

Survival Analysis for Acute Myeloid Leukemia - Challenge Data ENS by QRT

- ⦿ Developed LightGBM survival model achieving 0.7745 IPCW-C-index for leukemia patient risk stratification on multi-center clinical data
- ⦿ Applied feature engineering on genomic and clinical datasets to enhance predictive performance
- ⦿ Implemented gradient boosting with optimized hyperparameters for survival analysis on censored medical data

Research on Transformer Architectures and NLP Applications

- ⦿ Researched transformer architectures, attention mechanisms, and embedding techniques (Word2Vec, GloVe, BERT)
- ⦿ Built sentiment analysis model using **CamemBERT** achieving 95.91% accuracy on French movie reviews
- ⦿ Analyzed computational complexity differences between **Transformers** and Mamba architectures

Ant Colony Optimization for Shortest Path

- ⦿ Implemented ant colony optimization algorithm using Python **OOP** to solve the shortest path problem
- ⦿ Developed interactive visualization interface with **Tkinter** displaying real-time pathfinding and convergence

- Applied metaheuristic optimization techniques with pheromone trails and probabilistic decision making

Skills

Programming Languages	Python, JavaScript, TypeScript, C++
AI and Data Science	Pandas / NumPy, Scikit-Learn, PyTorch, LangChain, Jupyter Notebook
Web Development	React Native, Streamlit, HTML, CSS, JavaScript
Database	SQL, PostgreSQL
Version Control	Git, GitHub, GitLab
Soft Skills	Adaptability, Communication, Project Management, Team Management
Spoken Languages	French: Native, English: Fluent, Arabic: Native, Spanish: Beginner