

# Lydia Benzemrane

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[github](#) | [linkedin](#)

## EDUCATION

### Master in Intelligent Computer Systems

Houari Boumediene University of Science and Technology

Sep 2024 - Present

Algiers, Algeria

### Bachelor's Degree in Computer Systems and Software Engineering

Houari Boumediene University of Science and Technology

Sep 2020 - Jun 2023

Algiers, Algeria

## SKILLS

**Programming Languages** Python | JavaScript | SQL | Java/Scala

**Technologies** Pandas | NumPy | SciPy | React.js | MongoDB | Bootstrap | Sass | Tailwind | Figma | GIT

## EXPERIENCE

### Djezzy - MajestEYE

Data Science Immersion Program

December 2024 - Present

Algiers, Algeria

- Gained hands-on experience in data preprocessing, data parsing, and data exploration, with a focus on solving critical business challenges.
- Applied statistical methods to calculate system availability thresholds, ensuring optimal performance and reliability metrics.
- Designed and developed a comprehensive dashboard for monitoring system availability and silence time trends, enabling actionable insights through visual analytics containing :
  - **KPIs:** System Availability Rate (%), Total Transactions (selected period), Average Silence Time (seconds/minutes), Maximum Silence Time, Transaction Distribution (workdays/day periods).
  - **Silence Time Trends:** Heatmap and histograms (silence time per seconds and minutes).
  - **Comparative Analysis:** Availability vs. International Standards.

### CERIST - Research Laboratory

Research Intern

Nov 2024 - Present

Algiers, Algeria

- Conducting sentiment analysis on public transportation users based on web scraping and natural language processing (NLP) techniques.
- Building and annotating a custom dataset from social media data to train AI models such as BERT, adapted for Algerian dialect.
- Implementing and evaluating AI models for emotion extraction and problem categorization to derive actionable insights.

### Port of Algiers

Software development intern

Jan 2023 - Jun 2023

Algiers, Algeria

- Developed a container management system integrating real-time tracking using IoT components (Sim800L and GPS GY-NEO6MV2).
- Automated tracking and management processes, reducing errors and improving logistics efficiency.
- Designed and implemented a web and mobile application in Flutter, providing a user-friendly interface for container tracking.

## NOTABLE PROJECTS

### Climate and Soil Data Exploration in Algeria

Data scientist

Oct 2024 - Present

Algiers, Algeria

- Analyzed climate and soil data using statistical measures, box plots, histograms, and scatter plots to identify trends and correlations.
- Designed a functional dataset by addressing missing values, normalizing data, and reducing redundancies to improve data quality and usability.
- Programmed and evaluated classification algorithms, including Decision Trees and Random Forest, comparing their performance based on various metrics and average execution time.
- Implemented and analyzed clustering algorithms, CLARANS and DBSCAN, evaluating the results with different parameters and comparing them using appropriate metrics.