

## Education

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### Ecole Supérieure Polytechnique de Dakar

University Diploma of Technology in Computer Science

**2022 – 2024**

Dakar, Senegal

### Ecole Supérieure Polytechnique de Dakar

Computer Engineering Diploma

**2024 – Present**

Dakar, Senegal

## Courses Taken

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|-------------------------------|-----------------------|-----------------------|--------------------|
| • Algorithm                   | • Signals and systems | • Database Management | • Statistics       |
| • Object-Oriented Programming | • Local networks      | • Web Development     | • Operating system |

## Experience

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### Sonatel

Data Engineering Intern

**May 2024–July 2024**

Dakar, Senegal

**Topic: Setting up a data ingestion pipeline with Elasticsearch**

#### Key Responsibilities:

- Design and implementation of a complete data pipeline using the Elastic Stack suite
- Extraction and analysis of complex data from multiple sources
- Development of custom data transformations with Logstash configurations
- Creating interactive dashboards in Kibana with various visualizations
- Complete documentation of the process for knowledge transfer

#### Key Achievements:

- Reduced data analysis time through efficient pipeline design and generation automated dashboards, allowing the team to make data-driven decisions faster.

## Projects

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### Homework Submission and Correction Application with AI | Python, MySQL, Flask

**March 2025**

- Creation of a web application with Flask (Python) to manage the submission of online assignments.
- Integration of artificial intelligence to automatically correct submitted assignments (text analysis and awarding of grades).
- Setting up a MySQL database to store users, assignments and results.
- Design of a simple and intuitive user interface for students and teachers.
- Objective: to automate and streamline the correction process, while ensuring traceability of submissions.

### Creating a supermatrix | C(pointers, files, sorting algorithms)

**April 2025**

- Implementation of functions: allocation, product, submatrix, row permutation, etc.
- Advanced use of pointers, structures and dynamic arrays.
- Conversion between classical matrices and supermatrices with shared memory management.
- Creation of a header file and a complete test client program.
- Project carried out to deepen low-level programming and memory management.

### Smart Attic Management Platform | Flask, Python, Twilio, Supabase, Arduino

- Design of a web application with Flask and Python to display in real time data collected by sensors, such as temperature, humidity and type of crop.
- Using Arduino for environmental data collection, ensuring accurate and continuous monitoring of storage conditions.

- Integration with Supabase, a cloud database, for real-time data storage and management via a REST API. Sending automated notifications via Twilio in case of critical conditions, ensuring proactive and rapid
- management of storage issues.

## Technical Skills

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**Languages:** Python, C, HTML/CSS, PHP, SQL **Development tools:** VS Code, Git, GitHub,

**Technologies / Frameworks:** Linux, Flask, Supabase, MySQL, ELK Suite, Wix

## Centers of interest

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Tennis, Cooking, Reading, Cinema, Technology, Artificial intelligence