

Sidi Abderrahmane

Nouakchott, Mauritania

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Professional Profile

Holder of a Professional Bachelor's degree in Chemical Engineering and Process Engineering, with solid experience in the design and optimization of chemical and physical processes. An effective communicator, able to work both in teams and independently, with practical experience in laboratory and research projects.

Completed a 45-day Officer Cadet Training at the École Polytechnique – ISME under the supervision of the Ministry of Defence, developing strong discipline, leadership, and resilience. Demonstrates high adaptability, problem-solving skills, and commitment to excellence in professional environments.

Education

Higher Institute of Energy Professions (ISME) - Group Polytechnique Nouakchott, Mauritania
Professional Bachelor's Degree in Chemical Engineering and Process Engineering 2021 – 2024

ISME - Group Polytechnique (Ministry of Defence) **Nouakchott, Mauritania**
Military Officer Cadet Training (45 days) 2021

- Intensive military training focused on discipline, leadership, teamwork, and physical fitness
- Acquired key values such as responsibility, resilience, and operational readiness
- Completed as part of the academic program of ISME, under the supervision of the Mauritanian Ministry of Defence

ZemZem High School **Nouakchott, Mauritania**
Baccalaureate 2021

Professional Experience

ModersDigital **Nouakchott, Mauritania**
Full Stack Developer (Part-time) Present

- Developing and maintaining web applications using modern frameworks and technologies
- Collaborating with design and backend teams to implement responsive user interfaces
- Integrating APIs and database solutions for seamless application functionality
- Participating in agile development processes and regular code reviews

AfriPlast **Nouakchott, Mauritania**
Intern April 2025 – Present

- Supporting process optimization initiatives in plastic manufacturing
- Assisting in quality control and production workflows
- Analyzing production data to identify efficiency improvement opportunities
- Contributing to waste reduction strategies and sustainable manufacturing practices

Coorat App (Personal Project) **Nouakchott, Mauritania**
Head of Relations and Secretary Present

- Managing communication and coordination for various project activities
- Ensuring smooth information flow and maintaining project documentation
- Assisting in organizing and structuring administrative tasks for the project

- Designed and developed an innovative prototype for green hydrogen production
- Conducted in-depth analysis of electrolysis technologies and evaluated technical performance
- Manufactured and assembled the prototype in the laboratory, followed by testing and complete characterization

SNIM**Zouerate, Mauritania***Intern - Process Department, Quality Control**2023*

- Conducted tests and compliance analyses on products
- Contributed to optimizing quality control processes and documenting discrepancies
- Assisted in implementing corrective measures to improve production

Technical Skills

Software:

- COMSOL
- SolidWorks
- Matlab
- Microsoft Office

Programming:

- Front-end: HTML, CSS, JavaScript, React
- Back-end: Python, Node.js, Express
- Databases: SQL, MongoDB
- Other: LaTeX, Git, RESTful APIs

Languages

- **Arabic:** Native (C2)
- **French:** Upper-Intermediate (B2)
- **English:** Intermediate (B2)

Projects and Achievements

- **Electrolyzer Prototype:** Designed and manufactured a functional prototype for green hydrogen production
- **Industrial Process Optimization:** Studied and improved quality control processes at SNIM
- Participated in workshops and conferences on sustainable technologies
- Developed personal projects in web and mobile application programming

Interests

- Programming and technological development
- Energy innovation and sustainable development
- Continuous learning and exploration of new technologies