# **ESMAHI** SALAH EDDINE

#### CONTACT

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#### **EDUCATION**

ENGINEERING DEGREE IN
COMPUTER SCIENCE AND
TELECOMMUNICATIONS
2025-2028(expected)
ENSEEIHT

O MPSI-MP

2023-2025

Intensive two-year program in Mathematics and Physics - Centre CPGE Tétouan

O BACCALAUREATE IN

MATHEMATICAL SCIENCES B

(ENGINEERING SCIENCES OPTION)
2023

Hassan II High School, Tétouan, Morocco

#### **SKILLS**

- Programming & tools: Python, MATLAB, Ada, Git, SQL, LaTeX
- Expertise: System design & analysis; mathematical modeling; numerical optimization
- Soft skills: Teamwork; technical communication

#### LANGUAGES

- Arabic (Native)
- English (Advanced)
- French (Advanced)
- Chinese (Beginner)

#### **PROFILE**

As a student at ENSEEIHT, I am interested in applications of artificial intelligence and the modeling of computer systems. Curious and rigorous, I have acquired solid skills in programming (Python, C, MATLAB), algorithm design, and machine learning.

#### PROFESSIONAL EXPERIENCE

### DESIGN AND DEVELOPMENT OF AN INTERACTIVE E-

PORTFOLIO WEBSITE

- october 2025 Now
- Development of a personal static website using HTML, CSS, and JavaScript to showcase my profile and projects.
- Hosted on GitHub Pages with integration of a PDF résumé and an elevator pitch video.

#### **O EXTRACURRICULAR ACTIVITIES**

september 2025

- Play "Procès de King Kong": Attended a theatrical performance exploring social and legal issues through a creative lens.
- La Fresque du Climat : Participated in a collaborative workshop addressing climate challenges and the energy transition.

## O ACADEMIC PROJECTS – COMPUTER MODELING AND SIMULATION

september 2025 - Now

- Structured programming project in Ada: Developed robust programs for numerical computations and array manipulations. Implemented modularity, strong typing, and exception handling to ensure code reliability.
- Image analysis before/after decorrelation (MATLAB): Computed and displayed normalized histograms, applied thresholding, and performed edge detection on images.

### TIPE – AIR HUMIDITY-TO-ELECTRICITY CONVERSION USING POROUS MATERIALS

december 2024 - july 2025

- Developed a numerical model describing the behavior of porous materials under a humidity gradient.
- Designed and analyzed the mechanism for converting ambient humidity into electrical energy using porous materials.
- Utilized data analysis and visualization tools to compare simulated and experimental results.