



## COORDINATES

+213796939598

+213656459930

[youssradjenaihi@gmail.com](mailto:youssradjenaihi@gmail.com)

[youssra.djenaihi@etu.usthb.dz](mailto:youssra.djenaihi@etu.usthb.dz)

[in Youssra Djennaihi](#)

## PERSONAL INFORMATION

- Djasr Kasentina, Alger
- Age: 25 years (Born: January 27, 1999)
- Marital Status: Single

## SKILLS

- Microsoft Office  
(Word, Excel, Power Point, ...)
- Origin
- LaTeX
- MATLAB + SIMULINK
- COMSOL
- Helioscope
- PVsyst
- HOMER
- Meteonorm 8
- System Advisor Model (SAM)
- [WASP \(DTU\)](#):  
Google Earth, Surfer, Global Mapper
- QBlade (GUI)
- LINDO (Optimization)
- Python (IDE: Pycharm, Jupiter)
- Front-end Development Web  
HTML, CSS, Bootstrap (IDE: VS Code)
- Adobe Photoshop
- Adobe InDesign
- SketchUp
- Archilios

# YOUSRA DJENAIHI

Engineer in Renewable Energies and Energy Efficiency

[https://drive.google.com/drive/folders/1bCv0iXlnPFMvkj2ZkjHhuNvwNNHAWzmD?usp=drive\\_link](https://drive.google.com/drive/folders/1bCv0iXlnPFMvkj2ZkjHhuNvwNNHAWzmD?usp=drive_link)

## EDUCATION

- Master's Degree in Renewable Energie and Energy Efficiency (REEE)**  
University of Science and Technology Houari Boumediene (USTHB), Faculty of Physics  
2023 – 2024
- Bachelor's Degree in Fundamental Physics**  
University of Science and Technology Houari Boumediene (USTHB), Faculty of Physics  
2021– 2022
- High School Diploma in Mathematics June, 2018**
- One-Year Study in Geography and Land Use Planning**  
University of Batna 2  
2017 - 2018
- High School Diploma in Mathematics June, 2017**

## EXPERIENCE

- Sales Associate: Online and Offline Sales (Summer 2024)**  
**Mohammadia Mall - Business and Shopping Center, Algiers**  
Gained experience in E-commerce, including the integration of delivery solutions (Zimou, Yalidine, ZR Express), optimizing customer experience, and developing marketing strategies on social media.
- End-of-Study Project: Lithium-Ion Cells - Characterization and Selection for a 4S-5P Battery Pack Prototype for Applications in Aerospace, Electric Vehicles, and Renewable Energies.**  
January 27, 2024 – June 30, 2024  
**Satellite Development Center (CDS, Oran) - Algerian Space Agency (ASAL, Algiers)**
  - Perform the charge/discharge tests of 18650 Lithium-ion cells using a test bench controlled with a graphical interface (GUI : Python)
  - Measured the internal resistance (IR) using two methods: Direct Current (DC) and Alternating Current (AC)
  - Data Processing and Analysis (Excel)
  - Modeling and simulation of Lithium-ion battery behavior (MATLAB)
  - 3D printing of a 18650 battery holder with PLA material process
  - Resistance spot welding (RSW) process
  - Wire connection process
  - Authored two procedures for the center (Technical Reports)
    - Charging, discharging, and internal resistance measurement procedure
    - Resistance spot welding procedure
- Internship : Satellite Engineering - Introduction to the satellite electrical power system (EPS)**  
September 1, 2023 – September 16, 2023 & October 27, 2023 – November 5, 2023  
**Centre d'Exploitation des Systèmes de Télécommunications (CEST-ASAL) – Bouchaoui, Algiers**  
**Satellite Development Center (CDS-ASAL) – Bir El Djir, Oran**
  - Studied solar panels and batteries used in space applications
  - Assembly, Integration and Test (AIT) of satellite (visiting laboratories + satellite clean room)
  - Maximum Power Point Tracking (MPPT) and Solar PV Emulator (Overview)
- Internship: Combined cycle power plant July 16, 2023 – July 31, 2023**  
**SONELGAZ Power Plant – Cap Djinat, Boumerdes**

## LANGUAGES

- Arabic (Native)
- English
- French (TCF – B2)

## INTERESTS

- PHYSICA CLUB member
- CELEC CLUB member
- Coding
- Sport: Van Lang Vo Dao
- EDM Music
- Cooking
- Reading books
- Learning new languages
- Learning new Technologies
- Design & Deco
- Traveling

- Operation of: Gas Turbine, Steam Turbine, and Combined Cycle.

- **Lab Internship:** *Solar Concentrators and Flat Collectors*

(Throughout the 2nd Semester, Master 1 REEE, 2023)

**Renewable Energy Development Center (CDER) – Bouzareah, Algiers**

**CDER Annex – Ben Aknoun, Algiers**

- Measurement instruments and calibration methods
- Thermal performance study and Data Analysis (using Excel) of:
  - Cylindrical-parabolic concentrator + (SAM Advisor Project using Meteorom data)
  - Dish-Stirling concentrator
  - Flat plate collectors (water-based and air-based)

- **Lab Internship:** *Wind Energy – WAsP Project for the Ghriss Region, Mascara*

(Throughout the 2nd Semester, Master 1 REEE, 2023)

**Renewable Energy Development Center (CDER) – Bouzareah, Algiers**

**CDER Annex – Ben Aknoun, Algiers**

- Surface roughness and topography analysis
- Weibull distribution modeling
- Wind rose analysis
- Wind farm layout optimization and turbine positioning

- **Internship :** (February 5, 2023 – February 9, 2023)

**Renewable Energy Development Center (CDER) – Bouzareah, Algiers**

- Building thermal systems
- Green hydrogen production (water electrolysis)
- Biofuel production (overview)

- **Internship :** *Manufacturing Process of Polycrystalline Silicon-Based Photovoltaic Cells*

(April 20, 2022 – June 30, 2022)

**Research Center for Semiconductor Technology for Energy (CRTSE) – Frantz Fanon, Algiers**

**CRTSE Annex – El-Harrach, Algiers**

- Silicon wafer production (Bricking and slicing of silicon ingot)
- Solar cell manufacturing standard process :
  - Surface treatment and surface texturing process
  - Phosphorus diffusion process (P-N junction)
  - Anti-reflective coating (SiNx ARC)
  - Front and back surface metallization process (screen printing)
- Assembly and encapsulation of a photovoltaic panel

- **Teaching Assistant:** *Quantum Mechanics module for second-year students of university*

(PHISICA Club(USTHB) -Throughout the 2nd Semester, 2021–2022)

- **Sales Associate:** (Summer 2023)

**LUXURY GIFT, City Center Mall, El Mohammadia, Algiers**

Local Algerian artisanal boutique specializing in copper, ceramics, and Kabyle sterling silver crafts.

## PRESENTATION

- Y. Djenaihi, A.Boutte, Y.Salhi, L.Limam

*Lithium-Ion Battery Pack Assembly Process Exploring: Understanding and Initiation*

Poster presented at the 25th Scientific and Pedagogical Days (JSP), April 22–25, 2024, Faculty of Physics, USTHB.

- Y. Djenaihi, C. Lourdiane, L. Mansouri, O. Djema, S. Sali, M. Laribi

*Si Photovoltaic Cells Fabrication Process at CRTSE.*

Poster presented during the Open Days at CRTSE, July 3–4, 2022, CRTSE Annex – El-Harrach, Algiers.