

Alexandre MATHIEU

Energy Quantitative Analyst

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🌐 <https://alexandreugomathieu.github.io/alexandremathieu.github.io>

EXPERIENCES

Postdoc

DTU

December 2025 – Now

📍 Roskilde (Risø), DENMARK

Wind and solar generation forecasting

PhD student

Heliocity/CSTB/LOCIE

March 2022 – March 2025

📍 Grenoble, FRANCE

"Methodology development to guarantee building photovoltaic systems' performance including failure modelling."

R & D solar performance engineer

Heliocity

January 2022 – March 2022

📍 Grenoble, FRANCE

Quantitative Analyst

Ørsted, (Short Term Trading Optimisation)

November 2018 – October 2021

📍 Copenhagen, DENMARK

- Day-ahead probabilistic/deterministic forecasts of energy volumes, prices as well as energy-trading strategies via model feature investigations, machine learning methods and algorithms.

Master Thesis Student

Novo Nordisk (Business support)

January 2018 – July 2018

📍 Copenhagen, DENMARK

In collaboration with DTU and Novo Nordisk, . Grade: 12/12

"Establishment of a tool to prioritize energy-efficiency projects in industry".

EDUCATION

Denmark Technical University (DTU)

Master Sustainable Energy

Energy-saving study line

Double diploma in collaboration with CentraleSupélec

September 2016 – July 2018

📍 Copenhagen, DENMARK

CentraleSupélec

Engineering school in information sciences, energy and systems

September 2014 – July 2016

📍 Metz, FRANCE

LIST OF PUBLICATIONS

- *Solar RRL*, 2024, "Impact of Climate Change on Photovoltaic Performance: Case Study in French Cities"
Mathieu A., Thebault M., Kraiem S., Fraisse G., Thebault S., Boddaert S., Gaillard L.
- *EPJ Photovoltaics*, 2024
"Photovoltaic Failure Diagnosis Using Imaging Techniques and Electrical Characterization"
Hassan Daher D., **Mathieu A.**, Abdalla A., Mouhoumed Dek, Logerais P.-O., Gaillard L., Ménézo C.
- *Currently in submission process*
"Uncertainty Estimation of the Hourly Plane-Of-Array Irradiance from Satellite Data: A European Case Study"
Mathieu A., Thebault M., Fraisse G., Thebault S., Boddaert S., Gaillard L.

CONFERENCES

- *EUPVPMC 2024*, Copenhagen, DENMARK
"Uncertainty Estimation of the Hourly Plane-Of-Array Irradiance from Satellite Data: A European Case Study"
- *40th EUPVSEC 2023*, Lisbon, PORTUGAL
"Impact of Climate Change on Photovoltaic Performance: Case Study in French Cities"
- *Eurosun 2022*, Kassel, GERMANY
"Failure Risk Analysis of Photovoltaic Systems Based on Literature Review"

WORKSHOP

A workshop was built to introduce some tools to visualize and quantify underperformances on PV installation.
DATASUN 2022, Grand-Bornand, FRANCE
"PV Fault Detection Workshop", Link

LANGUAGES

English
French
Italian

