

Alexandre MATHIEU

Energy Quantitative Analyst

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Striving for accelerating the energy transition, I aspire to combine technical knowledge on energy systems and data-science skills to maximize the value of sustainable resources.

EXPERIENCES

PhD student

Heliocity/CSTB/LOCIE

March 2022 – Now

📍 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”.

- Literature review, energy-steward interviews and development of a decision-making tool to automate and accelerate energy-saving project implementation.

Energy engineer assistant solar-energy focus

AD FINE, Consulting firm in energy/environment

May 2017 – July 2017

📍 Grenoble, FRANCE

- Parametric-tool development in python to forecast photovoltaic energy (incl. losses) to assess profit earnings. 95 % of accuracy on yearly production.

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

DATA-SCIENCE SKILLS

Data mining

Data visualization

Machine Learning: Regression

Machine Learning: Classification

Business case - Analytics



Regression (Random forests, AdaBoost...)

Classification (KNN, GMM, Hierarchical..)

Data Visualization (Py. dashboards, Django, Tableau...)

PROGRAMMING SKILLS

- Programming competencies

Python (incl. scipy, sklearn...)

Git

SQL

R

Cloud-Kubernetes deployment

HTML/CSS/Javascript



- Development – Database

SQL

Oracle

MySQL

- Development – IDE

Pycharm/Spyder

Visual Studio

SOFT SKILLS

Team-player

Analytical

Dedicated

Detail-oriented

Structured

LANGUAGES

English

French

Spanish

Danish



AWARDS

Winning team of the ASHRAE Integrated Sustainable Building Design international competition 2018.

Collaboration between Technical Denmark University and Pennsylvania State University.

OTHERS