Alexandre MATHIEU

Energy Quantitative Analyst

1994 @ mathieu.al@laposte.net ☎ +45 50104647 ⚲ Copenhagen, Denmark in linkedin.com/in/mathieucentralesupelec/

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