

# Manon Fouquet, PhD

PROJECT LEADER - DEVELOPPER WITH EXPERTISE IN APPLIED **MATHEMATICS** 

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Projetct: network simulator







I have worked as a software developper and project manager for 7 years in the energy sector. I have managed and/or contributed to the development of several industrial codes involving numerical optimization and algorithm design (e.g. clearing algorithms for the european energy markets, various energy optimization models). My last experience is as backend developer on a web application to assist RE producers in their operational tasks.

I have a strong interest in understanding the business aspects of the projects I work on and I appreciate having project management responsibilites.

# Work experience



o Backend developer - Streem Energy, Paris 2022 - present

Web app for RE producers & aggregators in Ruby on Rails, React +

o Project leader, optimization engineer - Artelys, Paris

2016 - 2022

Developement of numerical optimization code and heuristics. applied to energy systems, energy markets and logistics. Web experience: electrical network simulation tool (see link above)

Technos: Java/ Python/ Mosel/ AMPL/ Knitro/ Docker/ git / SQL/ Javascript/React/Node.JS/Webpack

o PhD - EDF/CentraleSupélec

2013 - 2016

Model Predictive Control and optimization of energy plants, based on 1st principle models, MATLAB, Modelica, JModelica

o Internship - Mastère OSE - EDF R&D

Modelica library for quick sizing energy plants

o Internship-thermal engineering - TitanX, Sweden

Heat exchanger computation software, numerical methods for simulation and parameter fitting

#### Skills -



Modelling, optimization, algorithms

Energy systems

Data Science

Frontend

Project management

Python

Ruby on Rails

## Education -



o online classes on data science, DataCamp / Udacity / Coursera

2016 - present >200h, as a hobby

Front End Web Developper, Udacity

June - October 2020

4-month program

 PhD in automatic control, CentraleSupélec, France

April 2013 - March 2016

o Post master specialization in energy system optimization, Mines Paristech

September 2011 - September 2012

Master degree of engineering, ESSTIN

September 2006 - September 2011

Energy/Fluid mechanics/ Computer science and automatic control. 1.5 year in Sweden

o Baccalauréat Scientifique - Highest honors June 2006

## Languages



French

native speaker

English

bilingual

Swedish fluent

Spanish

intermediate

### **Hobbies**



Climbing, rowing, karate

Wood work, plumbing, eco-building techniques

Bike touring