



Lucas Pereira

DATA SCIENTIST ENGINEER · ENERGY SYSTEMS & MARKET MODELING

Paris

06-16-80-03-15 | ✉ lucaspereira0497@gmail.com | 📱 lucarammel

Summary

Data Scientist Engineer at **Artelys**, formerly at **Rte** and **IEA**. I specialize in implementing data and modeling solutions, with extensive experience in **Python** and **R** for data science, as well as in developing operational tools for data processing and mathematical modeling. I also have significant expertise in the energy sector, including energy systems modeling and market design. Interested by **ClimateTech**.

Education

Ecole des Mines de Paris (Mines ParisTech)

CIVIL ENGINEER

- Specialization in Geostatistics and Applied Probabilities

Paris, 5th arrondissement

Sept. 2020 - Mar. 2022

Ecole supérieure de physique et chimie industrielles de Paris (ESPCI Paris)

ENGINEERING - PHYSICS TRACK

- Multidisciplinary scientific foundation: mathematics, physics, chemistry, and biology. Major in Biophysics.

Paris, 5th arrondissement

Sept. 2017 - Sept. 2020

Lycée Hoche

PREPARATORY CLASSES FOR ENGINEERING SCHOOLS - PHYSICS & CHEMISTRY TRACK

- Multidisciplinary scientific training: mathematics, physics, and chemistry. Preparation for competitive engineering school entrance exams.

Versailles

Sept. 2015 - Aug. 2017

Experience

Artelys

CONSULTANT - DATA SCIENCE

- Development of operational solutions (dashboards, applications) for data science models. Development of reporting libraries, data visualization, APIs, and ML modeling.
- Data Science for the energy sector. Time series forecasting, clustering, and climate adjustment.
- DataOps and DevOps. Deployment of applications and microservices (Database, API, Dashboard).
- Conducting *R* training sessions. Program: from *R* basics to deploying a dashboard visualizing electricity consumption data.

Paris

May 2023 - Present

Réseau Transport Electricité (Rte)

ENERGY MARKET MODELING ENGINEER

- Modeling investments and market players' behaviors in energy and capacity markets.
- Development of a model in *R* for investment modeling and simulation, as an extension of the European power system simulator Antares Simulator ©.

Paris, La Défense

Mar. 2022 - Mar. 2023

Réseau Transport Electricité (Rte)

INTERN - NETWORK MODELING ENGINEER

- Prospective studies on the economic benefits of batteries for network congestion management by 2050.
- Modeling network investments for the implementation of stationary storage (batteries) in regional grids.
- Development and maintenance of a heuristic for calculating network investments and battery behaviors in *Python*.

Paris, La Défense

Sept. 2021 - Mar. 2022

International Energy Agency (IEA)

INTERN - MODELING ENGINEER

- Development of a *Python* model to disaggregate electricity demand by sub-usage sector using deep learning methods (MLPs) for various countries.
- Economic studies and contribution to the World Energy Outlook 2021, specifically in the *demand-side* section.

Paris, 15th arrondissement

Mar. 2021 - Sept. 2021

Languages & IT Skills

Programming #Python, #R (expert level, package development, modeling, data science, visualization, optimization, deep learning, APIs), #SQL
Software #Docker (Containerization and microservices development), #PostgreSQL (database), Slurm (HPC workload manager)
Languages English fluent, Spanish fluent