

# Lucas Pereira

DATA SCIENTIST ENGINEER · IMPLEMENTING DATA SOLUTIONS FOR CLIMATE & ENERGY

Paris

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**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)

Paris, 5th arrondissement

CIVIL ENGINEE

Sept. 2020 - Mar. 2022

• Specialization in Geostatistics and Applied Probabilities

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

Paris, 5th arrondissement

Engineering - Physics Track

Sept. 2017 - Sept. 2020

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

Lycée Hoche Versailles

PREPARATORY CLASSES FOR ENGINEERING SCHOOLS - PHYSICS & CHEMISTRY TRACK

Sept. 2015 - Aug. 2017

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

# **Experience**

**Artelys** Paris

CONSULTANT - DATA SCIENCE

May 2023 - Present

- 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.

#### Réseau Transport Electricité (Rte)

Paris, La Défense

Mar. 2022 - Mar. 2023

- 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 ©.

### Réseau Transport Electricité (Rte)

Paris, La Défense

INTERN - NETWORK MODELING ENGINEER

**ENERGY MARKET MODELING ENGINEER** 

Sept. 2021 - Mar. 2022

- 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*.

## **International Energy Agency (IEA)**

Paris, 15th arrondissement

INTERN - MODELING ENGINEER

Mar. 2021 - Sept. 2021

- 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.

# 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