PERMANENT POSITION – PHD RESEARCHER

RESEARCH ENGINEER WITHIN AN INNOVATIVE STARTUP

Data science - Smart grids – Energy transition
Applied mathematics for electrical network modernization

Low voltage electrical distribution networks are undergoing major changes due to the deployment of electric vehicles and renewable energies, along with a new need for flexibility. While distribution networks have not evolved for the last 50 years, the integration of these new functions requires a radical transformation.

Odit-e :

Odit-e is a **young startup** created in 2017 and based in Grenoble. Our team, made of 8 enthusiastic people, is determined to contribute to this necessary modernization of electrical networks, in order **to support energy transition**.

Benefiting from the smart meters deployment, Odit-e bring innovative services to a domain that has been set aside for too long: using **data sciences**, our algorithms take advantage of these new kind of data to radically transform electrical networks studies.

While classical methods rely on theoretical models, which are actually far from realistic, our "data driven" approach consider the real behavior of the network in all its complexity.

To support network operators facing energy transition, various solutions are being developed:

- Tools for renewable energies and electric vehicles integration (impact prediction, optimization, network capacity maps)
- Network observability (real-time and D+1 network state estimation)
- Network losses quantification and location
- Assets investments optimization (postponing/avoiding network reinforcements)

The need :

In 2018, Odit-e won an **innovation challenge** organized by ADEME, and two **European project H2020** with more than 30 international partners. These projects are the perfect opportunity to improve our algorithms and validate them in real conditions, various environments, with short term results and quick feedbacks. To meet these challenges, our R&D team need to grow.

Therefore, Odit-e is looking for a researcher with a PhD in data science or signal processing, for a position based in Grenoble.

The candidate should have skills in statistics and data analysis (machine learning, signal processing), along with a willingness to properly understand the challenges related to electrical networks. As research topics are numerous and various (graph identification, clustering, prediction, optimization, etc.), Odit-e is looking for someone curious and able to complete his skills when needed.

To stay up to date in Data Sciences, Odit-e works in close collaboration with the LJK (laboratoire Jean Kuntzmann), a Grenoble lab specialized in applied mathematics.

The researcher may have to contribute to both research and development, therefore computer skills would be welcome. All algorithms will be developed in python.

Your profil :

PhD researcher wishing to work in a promising field:
- Education in **applied mathematics** (statistics, data sciences, signal processing)
- High interest for **energy related challenges**, inclination to use his skills for energy transition
- Curiosity, willingness to innovate, to find new solutions and bring them to the end
- Ability to communicate and present in public
- Willingness to learn French

And of course, **the desire to work in a startup** is essential: small team, quick feedbacks on developed solutions, more responsibilities.

Position to be filled as soon as possible.

To apply :

If you want to jump in, and play a role in this energy landscape upheaval , please contact us !

Send CV and cover letter (and/or any question) to clementine@odit-e.com

L'ÈRE DIGITALE DU RÉSEAU ELECTRIQUE
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