

Julie Keisler

📍 Paris ✉ julie.keisler.rfo@gmail.com 🔗 juliekeisler.github.io 👤 julie-keisler 👤 juliekeisler

Experience

Starting research position

INRIA Paris - EDF R&D

June 2025 - now

- Generative artificial intelligence for statistical climate downscaling.
- Joint work with Pr. Claire Monteleoni, Anastase Charantonis, Yannig Goude and Boutheina Oueslati.

PhD in Computer Science

EDF R&D - University of Lille - INRIA Paris

Feb 2022 – Feb 2025

- Automated Deep Learning: algorithms and software for energy sustainability.
- Supervised by Pr. Claire Monteleoni, Pr. El-Ghazali Talbi and Margaux Brégère.

Teaching Assistant

Faculté des Sciences d'Orsay - Université Paris Saclay

Gif-sur-Yvette, since 2024

- Practical Work: Introduction to Deep Learning, for the MS Mathematics and AI.

Data Scientist Intern - 6 months

Sagemcom

Rueil-Malmaison, 2021

- Data Analysis and load forecasting for a rural electrification project in Madagascar.
- Development of microservices for customers (Docker, Jenkins, Spark technologies).

Awards

INREC 2024 conference, best paper award

Sept 2024, Essen

[Automated Spatio-Temporal Weather Modeling for Load Forecasting](#). ↗, with Margaux Brégère

Flood Map Prediction challenge, winning team.

Jan - April 2024, Paris

- Prediction of flood risk maps without streamflow data.
- Winning proposition with a CNN-based solution, team work with Eva Girousse.
- [Workshop paper at ICLR 2025 Workshop: Tackling Climate Change with Machine Learning](#). ↗

Education

Télécom Paris

Engineer Degree (MS in Computer Science)

Sept 2018 – Sept 2021

- Major in signal processing for AI, minor in computer graphics and interactive systems.

ETH Zürich

Exchange student

Sept 2020 – Feb 2021

- Semester Thesis in the Power System Laboratory: Benchmark electric power consumption forecasting algorithms, supervised by Yi Wang.
- **Coursework:** Power Market - Portfolio and Risk Management, Neural Network Theory, Environmental Systems Data Science, Corporate Sustainability.

Lycée Montaigne, Bordeaux

*CPGE, MPSI/MP**

Sept 2016 – Sept 2018

- Undergraduate studies to prepare for competitive entry exams to french engineering schools (Grandes Ecoles). Subjects studied: Mathematics, Computer Science, Physics, French literature, German and English.

Selected Publications

An algorithmic framework for the optimization of deep neural networks architectures and hyperparameters.

June 2024

Julie Keisler, El-Ghazali Talbi, Sandra Claudel, Gilles Cabriel

Journal of Machine Learning Research (JMLR) [🔗](#)

Automated Deep Learning for Load Forecasting.

Sept 2024

Julie Keisler, Sandra Claudel, Gilles Cabriel, Margaux Brégère

International Conference on Automated Machine Learning (AutoML). [🔗](#)

WindDragon: Automated deep learning for regional wind power forecasting.

March 2025

Julie Keisler, Etienne Le Naour

Environmental Data Science. [🔗](#)

A Bandit Approach with Evolutionary Operators for Model Selection.

Aug 2024

Margaux Brégère, **Julie Keisler**

International Workshop on Resource-Efficient Learning for Knowledge Discovery, ACM SigKDD. [🔗](#)

AutoML algorithms for online generalized additive model selection: application to electricity demand forecasting

Sept 2025

Keshav Das, **Julie Keisler**, Amaury Durand, Margaux Brégère

International Conference on Automated Machine Learning (AutoML). [🔗](#)

SerpentFlow: Generative Unpaired Domain Alignment via Shared-Structure Decomposition.

January 2026

Julie Keisler, Anastase Charantonis, Boutheina Oueslati, Yannig Goude, Claire Monteleoni

Preprint. [🔗](#)

Various Research activities

Python package DRAGON.

[Documentation](#) [🔗](#)

- Python package for the optimization of deep neural networks architectures and hyperparameters.

Conference Reviewer.

- ICANN24, CCAI workshop at NeurIPS24 and Environmental Data Science.

MS internships supervision.

2024 - 2026

- Global forecasting models for a large number of time series, EDF R&D.
- Statistical wind downscaling with AI, EDF R&D and INRIA Paris (3 internships).
- Automated selection of adaptive additive models for load forecasting, EDF R&D.
- Symbolic regression for satellite data using DRAGON, INRIA Paris.

Selected Talks

ICLR 2024 Workshop on Tackling Climate Change with Machine Learning

Wien, May 2024

- WindDragon: enhancing wind power forecasting with automated deep learning.

ConfStochStatML workshop, Wolfgang Pauli Institute.

Wien, Sept 2023

- Short-term load forecasting using optimized Deep Neural Networks.

Skills

Programming Languages: Python, R, C++

Packages: PyTorch, TensorFlow, Scikit-Learn, Numpy, Pandas, Xarray.

Tools: Linux, Latex, Git, Slurm on HPC, MPI, Docker.

Languages: French (native), English (fluent), German (intermediate).

Others: Football, guitar (end of musical studies certificate), volunteer for Data For Good.