

# Benjamin DONNOT

65 avenue de Paris  
92 320 Châtillon FRANCE

☎ +33 6 12 08 13 43

✉ benjamin.donnot @ gmail.com

in [www.linkedin.com/in/benjamindonnot/](http://www.linkedin.com/in/benjamindonnot/)

🐙 [github.com/BDonnot](https://github.com/BDonnot)

---

## Work Experience

- 2019-Now **Data Scientist**, *Paris*, RTE France.  
My missions include trying to apply state of the art "machine learning" algorithm to real time grid operations such as optimization of topologies or dynamic line rating.
- 2016-2017 **Assistant professor**, *Paris*, ENSAE (École Nationale de la Statistique et de l'Administration Économique) & ENPC (École Nationale des Ponts et Chaussées).  
Assistant professor for the courses of "Introduction to R software", "Python for a Data Scientist" and following student in the case of a last year informatic project (ENSAE), and "Machine learning and application" (ENPC)
- Janvier 2015 **Data Scientist Intern**, *RTE France*, Versailles, France.  
(6 months) Development and study (in c++ and R) of machine learning algorithm (mainly deep learning and reinforcement learning) in order to better operate the french power grid.
- Février 2015 **Consultant for l'ODJ**, *Observatoire Des Jeux (ODJ)*, Paris, France.  
(7 months) Mission obtained through ENSAE Junior Études. The objective was to build and study *a priori*, different profil of players in order to predict which one are possibly addicted.
- Février 2014 **Stagiaire Data Scientist**, *Amadeus IT group*, Sophia-Antipolis, France.  
(6 months) Application of machine learning algorithm (classification, clustering, prediction) for predicting the flow of passengers in any airport. Usage of *R* and *Python*
- Mars 2013 **Consultant**, *Jouve*, Paris.  
(3 months) Mission obtained through ENSAE Junior Études : detection et rationalization of bids searching, *web-scraping*, supervised clustering of more than 2,5 millions of bids. This study was made using *Python*.

---

## Education

- 2015-2019 **PhD in Machine Learning**, *CIFRE agreement (Industrial agreement of learning/training by research) between LRI lab (INRIA) and RTE France (French Transmission System Operator)*, Paris Area, France.  
PhD entitled "Deep learning methods for predicting flows in power grids : novel architectures and algorithms" available at <https://theses.hal.science/tel-02045873>.
- 2011-2015 **Student in Data Science, speciality Machine Learning**, *ENSAE (Paris Graduate School of Economics, Statistics and Finance)*, Top French engineer school in statistics, Malakoff, Paris Area, France.  
Main classes : data mining, machine learning, bayesian statistic, computer (C++, Python, R). Full-year internship in 2013-2014
- 2008-2011 **CPGE**, *Henri Poincaré Highschool*, Nancy, France, Two or Three-years intensive program in mathematics and physics preparing for the national competitive exams for entry to engineering schools..

---

## Computer skills

- Lead developer **grid2op**, **lightsim2grid**, **l2rpn-baselines**.  
And other type of packages (python, cpp and R) at the intersection between machine learning and grid operations.
- Languages **Objects Oriented (C++ -advanced knowledge) & Fonctionnal (OCaml - knowledge)**.
- Statistical **Python (Tensorflow, Scikit-Learn, Pandas, Boost-Python) -advanced knowledge & R (Rcpp, data.table)-advanced knowledge**.
- Others **L<sup>A</sup>T<sub>E</sub>X; Pack Office(VBA, Excel) & SQL -knowledge**.

---

## Extra curricular activities

- 2018-now **Co organizer of l2rpn competitions**.  
This serie of competitions aims at democratizing the topic of real time grid operations. By proposing a problem related sequential decision making in power system we hope to help the decarbonization of the powergrid.
- Sports**, *Triathlon, swimming, biking, running (marathon) and occasional hiking and skiing (during vacation)*.