

PAULIN JACQUOT, PHD

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Since January 2021, I started as research engineer at EDF Lab Saclay (OSIRIS department). In 2020 I was a Mitacs postdoctoral fellow researcher at the GERAD center and Polytechnique Montréal university. I defended my PhD at École polytechnique on Dec 5, 2019. My work focuses on distributed optimization and game theory algorithms, multi-agents systems, learning and applications to smart grid and the management of electric systems in general.

WORK EXPERIENCE

- Jan. 2021- present **Research Engineer, EDF Lab, Palaiseau, France**
Started a research engineer position, working in the department of *Optimization, Simulations, Risks and Statistics* (OSIRIS), in the team focused on Energy markets and Risks.
- Feb. 2020-Dec. 2020 **Postdoctoral Researcher, GERAD, Polytechnique Montréal, Montréal, Canada**
Postdoctoral research position (*Mitacs* fellowship), working on distributed and decentralized optimization methods and applications to electricity consumption flexibilities and network constraints, in partnership with Hydro-Québec research institute (IREQ).
- Sep. 2016-Jan. 2020 **PhD Researcher, EDF R&D and École polytechnique, Paris, France**
“*Game theory and optimization methods for decentralized electric systems*”. Supervised by S. Gaubert (Inria, CMAP), N. Oudjane (EDF R&D) and O. Beaude (EDF R&D) Patent on a non-intrusive method to manage flexibilities. Several publications and communications.
- Mar. 2016-Aug. 2016 **Artelys, Paris, France**
Scientific consulting in optimization, specialized in energy. Worked on stochastic optimization projects, use of AMPL, Python, optimization solvers XPRESS and Knitro. Winner of nonlinear optimization challenge MINO using solver Knitro.
- Mar. 2015-Aug. 2015 **University of California, Davis, United States**
Multi-stage stochastic optimization for Unit Commitment, supervised by Pr. David L. Woodruff and Pr. Roger J.B. Wets. Development of a new model, algorithm and scenarios for optimizing dispatch of electricity production. Use of Python, Pyomo, solver GUROBI.
- Jul. 2014-Aug. 2014 **Safran MBD, Suzhou, China**
Engineering internship on a green-belt project, standardizing production programs of some parts of landing gears of aircrafts.

EDUCATION

- 2016-2020 **PhD in applied mathematics, École polytechnique, Université Paris-Saclay, Paris, France**
“*Game theory and optimization methods for decentralized electric systems*”.
- 2015-2016 **M.Sc. in Operations Research (MPRO). Université Paris-Saclay, CNAM, Paris, France**
Leading program in France in operations research and combinatorial optimization (mathematical programming, graph theory, complexity, heuristics).
- 2012-2016 **Cycle ingénieur polytechnicien (M.Sc.). École polytechnique, Paris, France**
Graduate program in France’s leading engineering school, majors in applied maths and computer science. Lead a language-processing student project in partnership with IBM.
- 2009-2012 **CPGE. Lycée Henri Poincaré, Nancy, France**
Undergraduate program in advanced Mathematics and Physics to prepare the national competitive exams for the entrance in French *grandes écoles*.
- 2006-2009 **Baccalauréat scientifique. Lycée Jules Ferry, Saint-Dié, France**
French secondary Diploma, awarded with very high honors.

COMPUTER SKILLS

DEVELOPMENT: Python (expert), C++, JAVA and AMPL and GAMS experiences.
OPTIMIZATION TOOLS AND SOLVERS: CvxOpt, Pyomo, CPLEX, Gurobi, XPRESS, Knitro, Ipopt, Couenne.
OTHERS: GIT subversion control, Linux environment, HTML & CSS.

LANGUAGES

French (first language), English (fluent), Spanish (basic skills), German (basic skills), Chinese (basic skills).