



Nicolas PLAIN

Climate Change & Access to energy in Africa with renewable energy
Scientist | PhD Candidate | TEDx speaker | TV Host

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RESEARCH – [HAL](#) & [Google scholar](#) accounts

- Mar17-Today* **SCHNEIDER ELECTRIC, IGE, GAEL**, Grenoble, France
- PhD Candidate | Rural electrification in Africa with isolated and renewable microgrids
 - Taking into account the temporal variability of the solar resource and the load curves to optimize typical configurations of microgrids (production, storage, back-up)
 - Analysis of the effects of different mechanisms on supply and demand
 - Publication of different research article on this topic (see google scholar account)
- Feb16-Jui16* **EDF**, General Technical Direction, Grenoble, France
- Statistical study of climatic variability in hydrological and climatic models
 - Influence of climate indices on meteorological variables
- Feb15-Jui15* **METEO FRANCE**, Snow Study Center, Grenoble, France
- Research program in snow transport by wind and effects on avalanche risk
 - Use of meteorological models at a very small spatial and temporal scale
- Apr14-Aug14* **UNIVERSITY OF CALIFORNIA BERKELEY**, Berkeley, California, United States
Department of « Civil and **Environmental Engineering** » and « Computer Science »
- Development of modeling methods for the measurement of water quality for Lagrangian sensors
 - Study of the influence of meteorological variables on the propagation of a possible pollution
- 2013* **ECOLE POLYTECHNIQUE**, Paris, France
- Program of research in dynamics of the climate system
 - Research program on porous media, flow and mechanics, application to the water and geological resource
- 2009-2011* **LYCEE CHAMPOLLION**, PCSI-PC*, Grenoble, France
- Two years of research project on biofuels: test of different ratios of ethanol engine two times

WORKING EXPERIENCES - [Linkedin](#)

- Mar17-Today* **SCHNEIDER ELECTRIC**, Paris - Grenoble, France
PhD Candidate in the Access to Electricity and Emerging Technologies teams
- Creation of computer models to optimize microgrid configurations (costs and quality of service)
 - Leading a new development program on blockchain for access to electricity in Africa
 - Helping to define Schneider Electric's strategy for access to electricity
 - Study of new emerging technologies interesting for this market
- Sept18-Today* **INNOVATOR & SPEAKER**
- Innovation award for the first conference of the SIDE Africa – Bénin 2018
 - TEDx Speaker on “How Blockchain technology will promote access to renewable electricity in the world”
- May18-Today* **SOLAR IMPULSE FOUNDATION – WORLD ALLIANCE FOR EFFICIENT SOLUTIONS**
Advisory Expert
- Creation of computer models to optimize microgrid configurations (costs and quality of service)
 - Advising the World Alliance in the process of obtaining 1000 efficient & profitable solutions
 - Areas of expertise: Access to electricity in Africa with renewable energy; Blockchain technology for energy sector
- Aug17-Mar17* **COP21 TASK FORCE - OFFICE OF THE MINISTER OF THE ENVIRONMENT SEGOLENE ROYAL**
Mission leader
- Contributing to the strategy of the post COP21 under the French Presidency to prepare COP22 and other international meetings
 - Proposing strategic orientations and writing keynote speeches for the French Minister of Environment, Energy and the Sea
 - Thinking the specific role of cooperative action to speed up the efforts to address climate change
 - Building a network among climate and energy international cooperative initiatives, in the sectors of transport and short-lived climate pollutants, with different stakeholders (mainly governments, private sector, cities and subnational entities, NGOs and finance organizations)
- Jui13-Sept13* **THE BOSTON CONSULTING GROUP**, Casablanca, Morocco
Visiting associate
- Environmental issues related to fertilizer use in sub-Saharan Africa
 - Teaching materials for better use of fertilizers by local farmers
 - Detailed market analysis
 - Participation in meetings with the client
- Sep12-Dec12* **WHIBO**, Paris, France (Software Start-up)
- Coordination of a team of 5 polytechnicians for a consulting mission
 - Development of a strategy to optimize the commercial offer and the differentiation

Sep11-Avr 12

FIGHTER PILOT SCHOOL, air-base of Tours, France

Officer of the French Air Force

- Direction of a consulting mission in order to optimize and follow-up the training of pilots
- Development and implementation of a benchmark between all French air bases
- Implementation of solutions

SCHOOLING

2015-2016

UNIVERSITE GRENOBLE ALPES, Grenoble, France

Second year of Research Master in Renewable Energy and Climate Science and Environment: microgrids in developing countries, physics and chemistry of the atmosphere, climate and anthropogenic impact, geophysical fluid dynamics

2014-2015

ECOLE NATIONALE DES PONTS ET CHAUSSEES, Paris, France

Second year of Master in Environment and Civil Engineering and Construction

Apr14-Aug14

UNIVERSITY OF CALIFORNIA BERKELEY, Berkeley, California, United States

Department of « Civil and **Environmental Engineering** » and « Computer Science »

2011- 2014

ECOLE POLYTECHNIQUE, Paris, France

First year of a Master's program in Climate and Environmental Science (**GPA: 4.1, ranking 26/500**)

- Third year: Specialization in Climate and Environmental Sciences: Lessons that include Geophysics, Environmental Economics, Hydrodynamics, Meteorology and Economic Analysis of the Energy Sector
- Second year: specialization in engineering sciences: courses that include Mechanics, Fluid Mechanics, Mathematics, Applied Mathematics, Physics, Biology, Microeconomics and Macroeconomics

SKILLS

Language

English : fluent (945 TOEIC)

Spanish : moderate

Computer

Expert in R, Python, Matlab, Pack Office ; Adobe suite (premiere)

INTERETS ET ENGAGEMENTS

2018-2019

Host and Author of a 52' scientific documentary for the French National TV

- Explore concrete and local solutions to deal with climate change and the preservation of the environment.
- Promoting the job of researcher as part of the solution with different studies and recommendations

2015-Today

President and Founder of the "Fly for the Earth" Nonprofit Organisation www.enlairpourlaterre.fr

- Popularization of research in climate sciences and renewable energies
- Achievements of short, simple and impressive interviews of researchers and specialists during tandem paragliding flights
- Cycle of conferences / awareness in private companies in sustainable development, environment and security

2017-Today

Paragliding and Paramotoring

- Member and Manager of the Icaro Team Pilot in France (a paragliding brand)
- Paramotor instructor and tandem paragliding
- 7th at the French national championship of acrobatic paragliding