Edouard Pignède

Curriculum Vitae

Paris-Saclay Applied Economic (PSAE)
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☐ Github in Linkedin



Education

2021—present **PhD, Development and environmental economics**, AgroParistech (Paris-Saclay University) & Climate Economic Chair, Paris,

Climate change adaptation in Sub-Saharan Africa: Inequalities and vulnerabilities.

- Study on the impact of drought on inequalities using quantile treatment effect and distribution regression, as well as, the initial endowment in capital.
- Study on inter-sectoral mobility due to weather shocks in areas suitable for artisanal mining activity.
- Study on the capacity of agroecology to increase resilience and reduce C02-emissions of the agricultural sector in Sub-Saharan Africa.
- 2019–2020 Master's degree in environmental economics, *AgroParistech (Paris-Saclay University)*, Paris, Average: 15.95.

Courses: environmental econometrics, economy of natural resources, international trade and environment, public policies and environment, climate change economy

- 2016–2020 **Master's degree in industrial engineering**, *CentraleSupélec (Paris-Saclay University)*, Paris, Average: 16.35.
 - Specialization in industrial engineering and management of international project.
 - Courses: advanced probability, advanced statistics, economy, sustainable development, modelling and optimization.
 - Six-month project on applied mathematics: development of modelling algorithm of Hawkes process computed with Python.
- 2014–2016 Classes préparatoires, Henri IV, Paris.

A two-year intensive program in mathematics and physics to prepare for nationwide competitive entrance in top French graduate schools of engineering.

Publications

Journal Articles

2021 Edouard Pignède, Philippe Roudier, Arona Diedhiou, Vami Hermann N'Guessan Bi, Arsène T. Kobea, Daouda Konaté, and Crépin Bi Péné. Sugarcane yield forecast in ivory coast (west africa) based on weather and vegetation index data. Atmosphere, volume 12, page 1459. Multidisciplinary Digital Publishing Institute, 2021. doi: 10.3390/atmos12111459.

Non-refereed journal articles

2021 **Edouard Pignède** and Guillaume Daudin. French trade in the 18th century: Inflation and revolution. *Dialogue*, 2021. English version: link. French version: link.

On-going work

- 2024 Edouard Pignède and Julien Wolfersberger. Climate immobility in sub-saharan africa. 2024.
- 2024 **Edouard Pignède** and Victoire Girard. Golden cities: Artisanal mining and urbanization in sub-saharan africa. 2024.
- 2023 **Edouard Pignède**. Who carries the burden of climate change? heterogeneous impact of droughts in sub-saharan africa. 2023. Available upon request.

Research Experience

Nov, 2020 - Research engineer, French National Research Institute for Sustainable Development (IRD), Nov,2021 DIAL, Paris.

- Mapping of Sub-Saharan vulnerability to climate change through three components: exposition, sensibility and adaptation capacities. Building of multiple indicators of vulnerability using household survey (DHS, agricultural survey), satellite data (CHIRPS, ISRIC) and country data (infrastructures, mines localisation) computed with RStudio and QGIS.
- o Application of an original statistical method of spatial matching to assess the effect of roads on inter-sectoral mobility and population migration in Mali, using national census data and RStudio.
- Building a global database of coast escarpment, nightlight and wave height to assess the role of piracy on coast development using RStudio and QGIS.
- o Computing of price indexes in France in the 18th century using the repeated sales method, RStudio and data from the TOFLIT project (published in Dialogue n°62, English version: link. French version: link).
- May, 2020 Research engineer, French Development Agency (AFD), Paris, End-of-study internship.

- Nov, 2020 Development of statistical models of prediction of sugarcane yields in Ivory Coast based on machine learning algorithm (random forest) and using meteorological data (precipitations, temperatures) and satellite data (NDVI, EVI). Computation with RStudio and QGIS.
 - Publication of a scientific paper in a peer-reviewed journal as well as a research paper in French.

Other work experience

Sep,2017 – Treasurer and member of LNA project.

Sep,2019 • Member of a solidarity project aiming at offering musical workshops to disadvantaged children during six months in Burkina Faso, Vietnam, Cambodia and Bolivia.

In charge of a 50 000€ budget, workshop teaching, music composition and concert management.

Jul,2018 - **Data analyst**, Alphalyr, Paris.

Dec,2018 • Evaluation of advertising campaigns from the data obtained by the SaaS software Elitrack.

• Creation of an automatic tool to achieve this evaluation.

Skills

Computer Advanced knowledge of R and QGIS

skills Basic knowledge of Python and STATA

Languages French: Native

English: Fluent Spanish: Intermediate

Teaching experience

2023 Introduction to environmental economics (Master BIOCEB), AgroParistech (Paris-Saclay University), Paris.

Spring semester, in English. Teaching load: 9 hours.

2022 Introduction to climate change in economics (Master ADEPP), ENSAE, Dakar. Fall semester, in French. Teaching load: 2 hours.

- 2022 Microeconomy (Bachelor CPES), Paris School of Economics (PSL University), Paris. Fall semester, in French. Teaching load: 20 hours.
- 2022 On the use of GIS data in economy, AgroParistech (Paris-Saclay University), Paris. One session introduction lecture course to M2 students in English.
- 2018 **Teaching assistant in Information System**, CentraleSupélec (Paris-Saclay University), Paris. Course for 1st year student.
- 2018 Personal mathematics teacher, Paris.

Teaching mathematics to 10 high-school students.

Referees

Dr. Philippe Delacote

Senior Researcher, Department of Economy Bureau d'Economie Théorique et Appliquée (BETA) INRAE

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Dr. Julien Wolfersberger

Research fellow, Department of Economy Paris-Saclay Applied Economics (PSAE)
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Dr. Raja Chakir

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Dr. Flore Gubert

Senior researcher, Department of Economy DIAL IRD