# Martin Mugnier\*

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#### **Personnal informations**

Current Position: Ph.D. Candidate in Econometrics at CREST/ENSAE IP Paris

Nationality: French

Date of Birth: July 19th, 1995

Research interests Nonlinear panel data models, identification, high-dim. statistics, asymptotic statistics.

#### **Education**

Sept 2019 –	Ph.D. Candidate in Econometrics, Center for Research in Economics and Statistics (CREST) & EN-SAE IP Paris, France  • Supervisor: Prof. Xavier D'Haultfoeuille (CREST/ENSAE) • Dissertation topic: "Nonlinear panel data models and high dimensional statistics"
2018 – 2019	M.Sc. in Applied Mathematics (with honours), Paris-Saclay University, France  • Mathematics of Randomness track • major in Statistics & Machine Learning
2017 – 2019	Engineering Degree in Economics & Statistics, ENSAE IP Paris, France  ■ Major in Data Science & Statistical Learning theory
2016 – 2017	<b>First year of the Master in Economics (with highest honours)</b> , <i>Joint program with École Polytechnique, HEC Paris, ENSAE IP Paris, ENS Paris-Saclay,</i> France
2015 – 2016	B.Sc. in Economics (with honours), Panthéon-Sorbonne University, France
2015 – 2019	Economics and Management Degree, ENS Paris-Saclay, France  • Civil servant student ("normalien")
2013 – 2015	Preparatory classes for the competitive exam of ENS Paris-Saclay (option D2), Lycée Ozenne & Toulouse School of Economics, France  • Licences 1 & 2 in Economics and Management (ranked resp. 7/722 and 1/274)

## **Work in Progress**

2019	Point Identification of Panel Binary Models Without Logit Errors (with X. D'Haultfœuille & L.
	Davezies)
2020	Change in Change Asymptotics (with X. D'Haultfœuille & J. L'Hour)
2019	Linking patents to firms: insights with French firms (with M. Lequien, L. Py & P. Trichelair)

### **Grants & Awards**

2019 - 2022	Full State Doctoral Scholarship (French Ministry of Higher Education, Research and Innovation)
2015 - 2019	Full State Scholarship (ENS)
2017	2nd Prize – Challenge Deep-Learning (Hackaton EY-Genius ENSAE)

## **Teaching**

Courses

• Linear Algebra and Python (24 hrs), HEC Paris & ENSAE IP Paris (Undergrad. 3rd year, Fall 2019)

TA sessions

- Econometrics 2 (18 hrs), ENSAE IP Paris, prof. Mickael Visser (Grad. 1st year, Spring 2019, 2020)
- Statistics 1, (18 hrs), ENSAE IP Paris, prof. Arnak Dalalyan (Grad. 3rd year, Fall 2020)
- Statistics 2 (11 hrs), ENSAE Paris, prof. Matthieu Lerasle (Grad. 1st year, Spring 2019, 2020)
- Mathematical Fundations of Probability Theory (21hrs), ENSAE IP Paris, prof. Cristina Butucea (Undergrad. 3rd year, Fall 2020)

#### **Conferences & Seminars**

Talks CREST Ph.D. Seminar (9th July 2020, Paris, FR), EPFL Workshop on computational methods in

social science (1st July 2019, Lausanne, CH)

**Conferences** IAEE Conference (London 2020, CANCELLED), 50èmes Journées de la Statistique (Nice 2020, CANCELLED).

Others Co-organizer of: Firms and Markets Seminar (Ph.D. internal seminar of CREST, 2019-20), Statistics Econometrics Machine-Learning Seminar (2019-20).

## **Programming Skills & Languages**

**Prog. skills** Python\*\*\*, SAS\*\*, Stata\*\*\*, R\*\*, LATEX\*\*\*, HTML/CSS\*, Microsoft Office\*\* **Languages**: English (fluent, TOEIC: 915/990), Spanish (intermediate), French (native)

## Other Working Experience

2018

2017

Apr. – Sept | **CREST** (**Microeconometrics Lab**), Palaiseau, France (4 months)

• Research assistant • Supervisor: Xavier D'HAULTFŒUILLE • Theoretical econometrics.

Conducted research on identification issues and high-dimensional statistics in non-linear models with panel data.

June – Sept | **Banque de France (DGSEI/SEPS)**, Paris, France (4 months)

• Research intern • Supervisors: Matthieu LEQUIEN & Loriane PY • Designed a machine-learning based agorithm to fuzzy-match PATSTAT patents to the SIRENE French firms register.

2017 – 2018 | Société Générale (Inspection Générale), Paris, France (8 months)

• ENSAE Team Project in Applied Statistics (part-time internship) • Supervisors: Clément SENTIS & Walid AMRANE • Designed predictive algorithms to forecast and anticipate credit risk and defaults in a portfolio of medium-sized firms for a subsidiary in Africa.

April – July | **Toulouse School of Economics**, Toulouse, France (4 months)

• Research assistant to Senior Scholar Daniel-Li CHEN (IAST/NBER) • Applied econometrics: collected, cleaned and explored data from very large datasets • Designed and implemented econometric specifications to capture psychocognitive bias in Decision-Making in U.S. Courts such as cognitive caseload, time-effects, sequential-contrast effects, date of birth effects, etc. • Research assistance on the project: The Impact of Financial Payments from Pharmaceutical Industries on Prescribing Behaviors and Patient Outcomes.

May – July 2016 | French Embassy in Colombia (Regional Economic Service), Bogotá, Colombia (2 months)

• Economist intern • Supervisor: Laurent CHARPIN • Performed a statistical analysis aiming to highlight promising sectors for French exports • Produced a report from personal research and many interviews conducted in Spanish.

2016 – 2017 **C'efficace**, Paris, France (2 years)

• Individual teacher • Taught courses in Economics, Marketing and Mathematics to high-school and undergraduate students (5 students)