

Education

Ph.D in Computational neuroscience

Paris, France

ÉCOLE NORMALE SUPÉRIEURE (LNC² - IJN)

Since 2018

- Under the supervision of **Stefano Palminteri** and **Sacha Bourgeois-Gironde**

My Ph.D thesis consists in the study of human reinforcement learning through behavioral experiments and computational modeling. More specifically, I am interested in the acquisition and comparison of different kind of subjective values, namely these acquired from experience (via trial-and-error) and description (via semantic information). Common currency theory posits that orderly choice is only possible through the mapping of different option values on a common scale. A subsequent question is thus whether these values of different nature are commensurable, and if so, what is the decision and valuation process allowing such a comparison.

M.Sc in Cognitive science

Bordeaux, France

UNIVERSITÉ DE BORDEAUX

2016 - 2018

- 3 months internship under the supervision of **Sacha Bourgeois-Gironde**

Study of money emergence using multi-agent simulations and behavioral experiments. We show that learning using a simple reinforcement learning mechanism is a sufficient condition for a commodity money to emerge.

- 6 months internship under the supervision of **Nicolas Rougier**.

Study of strategies deployed by firms in theoretical duopoly situations through online behavioral experiments. We show that subjects rely on heuristics rather than complex learning mechanisms and decision rules.

B.Sc in Psychology

Bordeaux, France

UNIVERSITÉ DE BORDEAUX

2013 - 2016

Publications

- 2021 **The description–experience gap: a challenge for the neuroeconomics of decision-making under uncertainty**, Garcia, B., Cerrotti, F., Palminteri, S., [Philosophical Transactions of the Royal Society B](#)
- 2019 **Coordination over a unique medium of exchange under information scarcity**, Nioche, A.*, Garcia, B.*, Lefebvre, G., Boraud, T., Rougier, N. P., Bourgeois-Gironde, S., [Humanities and Social Sciences Communications - Nature](#)
- 2019 **Interaction effects between consumer information and firms' decision rules in a duopoly: how cognitive features can impact market dynamics**, Nioche, A.*, Garcia, B.*, Boraud, T., Rougier, N. P., Bourgeois-Gironde, S., [Humanities and Social Sciences Communications - Nature](#)

Communications

CONFERENCE POSTERS

- 2021 Subjective Probability, Utility and Decision Making [Online](#)
- 2021 Neurofrance [Online](#)
- 2019 Fourth Quadrennial Meeting on OFC Function [Paris, France](#)
- 2019 Doctoral days, Ecole Cerveau Cognition et Comportements [Paris, France](#)

SCIENCE POPULARIZATION

- 2019 Cog'Innov & Monocyte Edition collaboration, *Bavard S, *Garcia B. Les illusions économiques. [Paris, France](#)
- 2018 Organization of the Mindlab association's hackaton. [Bordeaux, France](#)

Skills

- Programming** Python, Matlab, R, C#, Javascript, HTML, CSS, \LaTeX
- Frameworks** Django (web apps), oTree (online experiments), Unity3d (game engine)
- Languages** French (native speaker), English (C1), Spanish (B2)