

Mathieu Molina

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Experience

Jan 2022 – Present Palaiseau, France	PhD Student, Inria FAIRPLAY – CREST ENSAE <i>Supervised by Vianney Perchet, Patrick Loiseau, and Nicolas Gast</i> Thesis: Fairness and Sequential Decision Making
Apr 2021 – Sept 2021 Grenoble, France	Research intern, Inria POLARIS - LIG Intersectional fairness in classification, supervised by Patrick Loiseau
Apr 2020 – Aug 2020 Luxembourg	Program Manager Intern, Amazon EU Private brands
Aug 2019 – Jan 2020 Boston, USA	Research intern, Boston Children's Hospital – Harvard University Time series prediction in health-care, supervised by Mauricio Santillana

Education

Sept 2017 – Sept 2021	Mines Paris – Engineering degree Specialization in applied probability and geostatistics
Sept 2020 – Sept 2021	PSL University – Master degree Artificial Intelligence, Systems, Data Master degree
Sept 2018 – Feb 2019	Tokyo Institute of Technology – Exchange semester
Sept 2015 – Sept 2017	Lycée Louis le Grand / Henri IV – CPGE MPSI/PSI*

Publications

Download [here](#).

Prophet Inequalities: Competing with the Top ℓ Items is Easy

with Nicolas Gast, Patrick Loiseau and Vianney Perchet – SODA 2025

Multi-Armed Bandits with Guaranteed Revenue per Arm

with Dorian Baudry, Nadav Merlis, Hugo Richard and Vianney Perchet – AISTATS 2024

Equitable Pricing in Auctions

with Simon Finster, Patrick Loiseau, Simon Mauras, and Bary Pradelski – Working paper

The Price of Fairness in Bipartite Matching

with Rémi Castera, Felipe Garrido-Lucero, Simon Mauras, Patrick Loiseau and Vianney Perchet – Working paper

Trading-off Price for Data Quality to Achieve Fair Online Allocation

with Nicolas Gast, Patrick Loiseau, Vianney Perchet – NeurIPS 2023

On Preemption and Learning in Stochastic Scheduling

with Nadav Merlis, Hugo Richard, Flore Sentenac, Corentin Odic and Vianey Perchet – ICML 2023

Bounding and Approximating Intersectional Fairness Through Marginal Fairness

with Patrick Loiseau – NeurIPS 2022

Estimating the Cumulative Incidence of COVID-19 in the United States Using Influenza Surveillance, Virologic Testing, and Mortality Data: Four Complementary Approaches

with Fred S Lu, Andre T Nguyen, Nicholas B Link, Jessica T Davis, Matteo Chinazzi, Xinyue Xiong, Alessandro Vespignani, Marc Lipsitch and Mauricio Santillana – PLOS Computational Biology 2021

Avoidable Serum Potassium Testing in the Cardiac ICU: Development and Testing of a Machine-Learning Model

with Bhaven B Patel, Francesca Sperotto, Satoshi Kimura, Marlon Delgado, Mauricio Santillana and John N Kheir – Pediatric Critical Care Medicine 2021

Awards

Best poster award at GAIMSS '24 for *Equitable Pricing in Auctions*

Best poster award at Hi! PARIS Summer School '24 for *Trading-off Price for Data Quality to Achieve Fair Online Allocation*

Organizational Roles & Academic Service

Teaching

Teaching assistant – Mines Paris, in 2022, 2023 and 2024
for *Data-science* course

Invited speaker – Mines Paris, in 2022, 2023 and 2024
talk on *Fairness in Machine Learning for Applied probability and geostatistics* specialization

Events Organization

2024 – In charge of the Inria FAIRPLAY team weekly seminar

2024 – Organization of a reading group on *Diffusion models*

2023 – Organization and creation of the Inria FAIRPLAY team-retreat in the Calvados region of France

Reviewing

NeurIPS 2023 – 2024, International Journal of Game Theory, ICALP 2023, EWAF 24'

Other Skills

Programming: Python – intermediate (SciPy-Pandas-Sklearn-Keras), SQL – intermediate, Java – basic, R – basic,

Languages: English – fluent (Toefl IBT 112/120), Chinese – intermediate, Japanese – basic