

I leverage applied mathematics, machine learning and data science to understand information disorders and collective voting behaviours. I aim at tackling social issues promoting multi-disciplinary approaches.

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## Education

- Sep.17-Dec.22 **MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT), MS & PhD in Social and Engineering Systems**  
*Relevant coursework: Fundamentals of Statistics, Statistics Computation & Application, Causal Inference, Fundamentals of Probability, Modern Probabilities, Social Choice Theory, Network Science & Models, Optimized Democracy, Data-Driven Decision Making and Society, Political Economy, Philosophy of Political Economy*
- Sep.15-Jun.17 **ÉCOLE CENTRALE PARIS, BS in Engineering, MS in Applied Mathematics**  
*Relevant coursework: Probability, Statistics, Algebra and Cryptology, Algorithms and Programming, Machine Learning, Software Engineering, Economy, Sociology, Law, Epistemology*

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## Work Experience

- Sep.17-Now **MIT - Institute for Data, Systems, and Society (MA)** Research Assistant  
**Networked behaviors** (with D. Halpern, A. Procaccia, J. Halpern, E. Mossel, P. Hosoi and A. Jadbabaie)
  - Model probabilistic voting systems relying on graph topology and opinion dynamics to investigate theoretical behavior of a novel model of governance: fluid democracy
  - Studied strategic behaviour in NBA teams based on players' positions and decisions (terabyte-size dataset)**Information disorders** (with A. Tohidi, BY. Park, A. Abecassis, M. Dahleh, A. Jadbabaie, A. Berinsky and D. Eckles)
  - Study resonance of narratives with the citizenry and its interplay on social movements in France through a corpus of public opinion surveys and scraped media output
  - Leverage 100k Reddit posts on tinnitus with NLP and network's dynamics to understand peer-support online
  - Measured the impact of online marketing on journalism credibility since the 2016 US election. Conducted NLP and Bayesian analyses of 1M headlines, and randomized experiments (n=10,000) testing ads' causal effects
- Jun.-Sep.19 **AEROSPACELAB (Belgium)** Machine Learning (ML) Consultant
  - Designed strategic guidelines for software development. Created modules for monitoring threats on social media, from data collection (Twitter, YouTube & Reddit) to language analysis and network dynamics
- May.-Aug.18 **CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES (DC)** Research Intern in Technology and Policy
  - Led study on the impact of the Internet ecosystem and regulation on people's relation to information
  - Collaborate with lawyers, industry partners and state officials to inform policy makers about GDPR
- Jun.-Aug.17 **NOKIA BELL LABS - Network, Algorithms, Analytics, Control and System Lab (NJ)** Research Intern in ML
  - Optimized slice allocation with forecasting methods and time series analysis to lower communication latency
  - Won intern R&D talk contest; and worked on side project with CEO, Marcus Weldon about news credibility

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## Teaching

- Feb.21 **MIT - IDSS Masters Instructor: Quant Review** — Created and taught seminar in Algebra, Probability and Statistics, and Data science for 30 Masters Students (Feedback available)
- Jul-Aug.20-21 **MIT - Sloan School MBA TA: Data, Model and Decisions** — Taught 120 MBA Students in Probability, Statistics and Optimization, created recitations, wrote and graded homework (Evaluation: 6.7/7, details available)

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## Awards

**Hammer Fellow** 2019 - Award that empowers first-year IDSS PhD students  
**Best Masters Thesis Nominee** 2019 - One of four finalists for the best thesis award in Technology & Policy  
**Centrale Talent** 2017 - Reward outstanding initiatives and achievements of a student at École Centrale Paris  
**Coordination Jeunes Promotions** 2017 - Best project for the BeeGames Association  
**Education Award** 2012 - Reward exceptional academics, leadership and civic life engagement in Ile-de-France

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## Skills & Interests

Python, R, SQL, HTML, MicrosoftOffice (JAVA, Matlab, CSS)

French, English, Italian (Spanish)

**Journalism:** Created a newspaper and worked for two radios (Radio Parentheses and Soleil de Re), writing editorials and hosting live political shows between 2010 and 2018

**Basketball:** Practice in competition on national level, coach. Won MIT-IM with super team. **Windsurfer, runner**

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## Service & Leadership

- Jun.19-Now* **Conference on Decision and Control and for the American Control Conference (USA)** [Reviewer](#)
- Jun.21* **International Conference of the Web and Social Media (ICWSM, remote)** [Workshop Organizer](#)  
Organize a 1-day workshop *Alternative Realities in Troubled Democracies* with 100 participants, focused on understanding, measuring and mitigating informations disorders. Create workshop's content, advertise event. Select submitted papers for presentations. Host David Rand and Renee DiResta as guest speakers
- Jan.21* **LIDS Student Conference (MA)** [Conference Chair and Organizer](#)  
Organized a 1-day online conference featuring the work of 28 MIT LIDS student. Hosted Zico Kolter and Kimon Drakopopoulos as guest speakers. Lead the Machine Learning and Statistics Session. Created community content
- Apr-Jul.20* **MIT - IDSS Covid-19 COLLABORATION (ISOLAT, remote)** [Researcher](#)  
Designed opt-out and class schedules for MIT back-to-campus strategy
- Sep15-Jun18* **BeeGames Association (Paris, France)** [Founder and Chair Person](#)  
Launched a cross-functional collaboration between companies, universities, and basketball professionals. Lead of a 25-person team creating a network of investors and organising events with partners. Worked with basketball professional athletes and federations (BeeGames' official sponsor was Boris Diaw)

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## Publications

### [Peer-reviewed](#)

- TBA* *Varieties of Resonance: The Subjective Interpretations and Utilizations of Media Output in France*

### [Working Papers](#)

- Delegation schemes for which fluid democracy outperforms majority voting on the complete graph*  
*The optimal size of an epistemic congress* (Under Review)  
*Native advertisement and the credibility of online publishers* (Under Review, [link](#) to pre-print)  
*What can we learn about tinnitus from social media posts?*

### [General Media & Published Reports](#)

- Aug.20* **MIT ISOLAT**, *Rules of Thumb: Adjusting Class Schedules in Fall Term '20* ([link](#))  
*July.20* **MIT ISOLAT**, *A privacy-preserving opt-out mechanism for returning to campus* ([link](#))  
*Aug.19* **L'Hémicycle (France)**, Article (in French): *Internet, you lie!* ([link](#))

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## Talks

- Apr.21* **LIDS Tea Talk (MA)**, Talk: *Fluid Democracy: An Alternative Approach to Decision-Making in Democracy*  
*Aug.20* **IC2S2 (MA)**, Talk: *The effect of native advertising on the U.S. News Industry*  
*Apr.20* **WiDS (MA)**, Panel: *Data weaponized, data scrutinized: a war on information*  
*Sept.18* **College of Computing Launch (MA)**, Poster: *Online Ads: Failure of Quick-Fix Solution to Journalism Crisis*  
*Sept.18* **IDSS Advisory Board, (MA)**, Poster: *Online Ads: Failure of Quick-Fix Solution to Journalism Crisis*  
*Jun.18* **TMP Consortium (Netherlands)**, Talk: *The role of the CRNs in online misinformation*  
*May.17* **French ENT annual congress (Portugal)**, Invited speaker: *Will expert systems displace clinical intuition?*

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## News Coverage

- Nov.20* **MIT News**, *Understanding how people make sense of information in the information age* ([link](#))  
*Oct.20* **LIDS/AIL**, *Understanding how people make sense of information in the information age* ([link](#))  
*Aug.19* **MIT News**, *Combining artificial intelligence with their passions* ([link](#))  
*Sept.18* **Alter Ago Le Mag** *Manon Revel: En deçà et au-delà des algorithmes* (Under and beyond algorithms) ([link](#))