

CURRICULUM VITÆ

Antoine VENDEVILLE

Born on April 23rd, 1994 in Paris, France (29 years old).

Post-doctoral researcher

Médialab, Sciences Po Paris

Supervisory team

Pedro Ramaciotti Morales

Other affiliations

Paris Institute of Complex Systems

Digital Speech Lab

Contact

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Google Scholar profile

ACADEMIC POSITIONS

2023-2025

Post-doctoral researcher at Médialab Sciences Po, Paris. AI-Political Machines project, supervised by Pedro Ramaciotti Morales. Research topics: mathematical modeling of political opinions, interactions in online social platforms, and algorithmic recommendations.

2019-2023

PhD student, University College London, Department of Computer Science, Centre for Doctoral Training in Cybersecurity. *The echo chamber effect in social networks: theoretical analysis and steering strategies*. Supervised by Dr. Benjamin Guedj and Dr. Shi Zhou.

2019

Research assistant, Sorbonne Université. Department of Computer Science (LiP6), team NPA. Supervised by Anastasios Giovanidis, Bruno Baynat, Clémence Magnien. Duration 5 months.

2018

Research assistant, Sorbonne Université. Department of Computer Science (LiP6), team NPA. Supervised by Anastasios Giovanidis, Bruno Baynat, Clémence Magnien. Duration 5 months.

OTHER AFFILIATIONS

- Paris Institute of Complex Systems.
- Digital Speech Lab at University College London.

RESEARCH VISITS

2023 IFISC, University of the Balearic Islands, Palma de Mallorca (1 week).

2023 SAILab, University of Siena, Italy (2 months).

2022 LiP6, Sorbonne Université, Paris (3 months).

PUBLICATIONS

2023

- A. Vendeville, B. Guedj and S. Zhou. On discord in the voter model for complex networks. In review. Preprint on [arXiv](#).
- A. Vendeville, A. Giovanidis, E. Papanastasiou and B. Guedj. Opening up echo chambers via optimal content recommendations. Proceedings of Complex Networks and Their Applications XI, 2023. [Link](#).

2022

- A. Vendeville, B. Guedj and S. Zhou. Towards control of opinion diversity by introducing zealots into a polarised social group. Proceedings of Complex Networks and Their Applications X, 2022. [Link](#).

2021

- A. Giovanidis, B. Baynat, C. Magnien and A. Vendeville. Ranking Online Social Users by Their Influence. IEEE/ACM Transactions on Networking, 2021. [Link](#).
- A. Vendeville, B. Guedj and S. Zhou. Forecasting elections results via the voter model with stubborn nodes. Applied Network Science 6, 1, 2021. [Link](#).

2019

- A. Giovanidis, B. Baynat and A. Vendeville. Performance Analysis of Online Social Platforms. Proceedings of IEEE Conference on Computer Communications, 2019. [Link](#).

TALKS AND PRESENTATIONS

2023

- Echo chambers and opinion diversity in the Voter Model: towards regulation strategies for social networks. Presented on November 7, 2023 at the IFISC in Palma de Mallorca.
- Opening up Echo Chambers via Optimal Content Recommendation. Presented on April 25, 2023 at the MédiaLab Sciences Po Paris.

- Opening up Echo Chambers via Optimal Content Recommendation. Presented on April 20, 2023 at the [NetPLACE](#).
- Opening up Echo Chambers via Optimal Content Recommendation. Presented on April 14, 2023 at the Data Natives seminar at City University, London.

2022

- Opening up Echo Chambers via Optimal Content Recommendation. Presented on November 8, 2022 at [Complex Networks 2022](#).
- Active links in the voter model with zealots, poster presented on October 20, 2022 at [Conference on Complex Systems](#).
- Recommendation of content to mitigate the echo chamber effect, poster presented on October 17, 2022 at [Conference on Complex Systems](#).
- Opening up Echo Chambers via Optimal Content Recommendation. Presented on 29, 2022 at Centre d'Economie de la Sorbonne, for the [Networks and Games](#) seminar.
- Fighting political echo chambers via content recommendation: Method and application to the 2017 French presidential elections, presented on June 29, 2022 at the Mediterranean School of Complex Networks ([MSCX](#)).
- Depolarising Social Networks: Optimisation of Exposure to Adverse Opinions in the Presence of a Backfire Effect, presented on April 12, 2022 at Sorbonne Université to the [Complex Networks](#) and [NPA](#) teams.
- Voter model with zealots for opinion control and forecast of election results, presented on January 7, 2022 at University College London, for the Information and Decision Systems research group ([IDS](#)).

2021

- Towards control of opinion diversity by introducing zealots into a polarised social group, poster presented on December 1, 2021 at [Complex Networks 2021](#).
- Voter Model with Stubborn Agents: from Theoretical Solutions to Prediction of Political Elections, presented on July 5, 2021 at [Networks 2021](#).

SUPERVISION

2021 Benjamin Guedj and I supervised Valentin Kilian for a 2 months research internship on opinion dynamics at [Inria](#).

TEACHING

2019-2023 Teaching assistant at University College London for [Complex Networks and Web \(COMP0123\)](#). 30h per academic year, 120h total.

2020-2021 Teaching assistant at University College London for [Introductory Programming \(COMP0066\)](#). 30h.

2013-2017 Private tutor of mathematics for high school students in Paris.

ACADEMIC ENGAGEMENT

I am a member of the Complex Systems Society. I was a student volunteer at INFO-COM 2019.

I have reviewed papers for the following journals.

- Nature Scientific Reports (5 papers, 2020-2022).
- PLOS ONE (1 paper, 2022).
- Computer Communications (1 paper, 2022).
- Proceedings of the Royal Society A (1 paper, 2021).

FUNDING

My post-doctoral research project at Sciences Po is funded by the McCourt institute. My PhD was funded by the UK EPSRC. In 2023, I received the yrCSS Bridge Grant, which fosters collaborations between young researchers.

EDUCATION

2018-2019 Master 2 Data Science, Université Claude Bernard, Lyon.

2017-2018 Master 2 Mathematical Modelling, Sorbonne Université.

2015-2017 Master 1 Mathematics and Applications, Sorbonne Université.

2012-2015 Bachelor in Mathematics and Applications, Sorbonne Université.