

CURRICULUM VITÆ

Antoine VENDEVILLE

Born on April 23rd, 1994 in Paris, France (30 years old).

Post-doctoral researcher

[Médialab, Sciences Po Paris](#)

Supervisory team

[Pedro Ramaciotti Morales](#)

Other affiliations

[Paris Institute of Complex Systems](#)

[Learning Planet Institute](#)

[Digital Speech Lab](#)

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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, algorithmic recommendations, regulation of online social platforms.

2019-2023

PhD student at [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.

RESEARCH VISITS

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

2022 [LiP6](#), Sorbonne Université, Paris (3 months).

PUBLICATIONS

2025

- A. Vendeville, F. Diaz-Diaz. Echo chamber effects in signed networks. [Physical Review E](#), 111(2), 024302.

2024

- A. Vendeville. The echo chamber effect in social networks: theoretical analysis and steering strategies. [PhD thesis](#).

2023

- A. Vendeville, S. Zhou and B. Guedj. Discord in the voter model for complex networks. [Physical Review E](#), 109(2), 024312.
- 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.

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.

2021

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

2019

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

WORKING PAPERS

- A. Vendeville, J. Royo-Letelier, D. Cassells, J.-P. Cointet, T. Faverjon, T. Lenoir, B. Mazoyer, B. Ooghe-Tabanou, A. Pournaki, H. Yamashita et P. Ramaciotti. Population of X/Twitter users and web domains embedded in a multidimensional political opinion space. Submitted to Nature Scientific Data.
- A. Vendeville. A model for French voters. Submitted to Physical Review E. [arXiv:2501.13215](#).
- G. Di Bona, E. Fraxanet, B. Komander, A. Lo Sasso, V. Morini, A. Vendeville, M. Falkenberg, A. Galeazzi. Sampled Datasets Risk Substantial Bias in the Identification of Political Polarization on Social Media. [arXiv:2406.19867](#).

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 was a co-organiser of the 2025 edition of the [Winter Workshop on Complex Systems](#). I was a student volunteer at [INFOCOM 2019](#). I have reviewed papers for the following journals.

- [IC2S2](#).
- [Nature Scientific Reports](#).
- [PLOS ONE](#).
- [Computer Communications](#).
- [Proceedings of the Royal Society A](#).

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.