

Research Engineer in Computational Social Sciences 2 years (send applications by 15 Jan, 2023)

Project Social Media for Democracy (SoMe4Dem)

The médialab at Sciences Po is hiring a Research Engineer in computational social sciences to work on the Social Media for Democracy (SoMe4Dem) project, funded by the European Commission Horizon “Reshaping Democracy”.

The médialab is an interdisciplinary research laboratory gathering researchers, engineers and designers in social sciences and computer science. The SoMe4Dem project is a highly interdisciplinary initiative by Sciences Po and 8 partners, including University of Amsterdam, the Max Planck Institute, University of Venice, and University of Bristol. In this project, we seek to analyze the impact of social media in different aspects of politics, including political preference, polarization, extremism, and collective organization into mobilization, petitioning and fundraising.

This project involves social media data collection operations across Europe, and the development of analysis tools based on network and textual analysis. We are at the frontier between computer science and political sciences, but in this project we will also work with social psychologists, economists, mathematicians, sociologists and political scientists, trying to model, observe and measure political behavior at massive scales.

Some of the tasks that the hired person will perform include:

- conduct large-scale data collection operations on several platforms and countries;
- participate in data analysis involving innovative research developed with our interdisciplinary team;
- develop open source scientific software tools and data analysis pipelines;
- interact with team members across partner institutions to collaborate on interdisciplinary research, leading network and text analysis operations;
- contribute to the preparation and redaction of academic articles.

Desired profile: we are looking for profiles with strong data analysis and coding skills:

- good knowledge of Python, writing scripts and modules;
- writing open source code collaboratively with git;
- familiarity with main scientific computing and data analysis Python modules (sklearn, scipy, spacy...);
- experience with data visualization tools;
- experience designing and implementing scientific software and algorithmic development is highly appreciated;

- experience managing large volumes of data locally and on remote servers (we conduct analyses on tens of millions of social platforms users producing large volumes of interactional and textual data traces);
- common knowledge of SQL & NoSQL databases.

What we offer:

- A great and innovative environment to learn computational social science research. You will join a team of experienced researchers and engineers developing cutting edge tools in social network analysis. Research Engineers are encouraged to participate in scientific publications and to pursue parallel projects relying on their own initiative if desired and in line with the lab's works.
- The opportunity to work with exciting data and on phenomena related to social and polarization, extremism, and more broadly participating in research bringing an understanding of online political dynamics.
- Up to **45k€/year gross salary** depending on the experience of the candidate, for 1 year, renewable for an additional year, in addition to restaurant vouchers, partial commuting costs, **40 days paid leave per year (+5 RTT)** and competitive health insurance complementary to the national healthcare system. **Remote work is possible up to 2 days per week.**

Starting date: The hired person would ideally begin working in **March 2023** (but there is some flexibility to arrange for different starting dates).

Deadline: Applications sent by **15 Jan, 2023**, will receive full consideration.

Interviews: Selected candidates will be invited to an interview the week of the 23 Jan 2023.

Where to apply

If you are interested in the position please send us CV and a 1 page cover letter (indicating the date at which you could start) to: recrutement.medialab@sciencespo.fr

Preview of related past works

If you want to take a look at the kind of research done at the European Polarisation Observatory, check the following articles:

- Ramaciotti Morales, P., Berriche, M., & Cointet, J. P. (2022, July). [The geometry of misinformation: embedding Twitter networks of users who spread fake news in geometrical opinion spaces](#). In International Conference on Web and Social Media.

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- Ramaciotti Morales, P., & Cointet, J. P. (2021, September). [Auditing the effect of social network recommendations on polarization in geometrical ideological spaces](#). In *Fifteenth ACM Conference on Recommender Systems* (pp. 627-632).
- Metin, O. F., & Ramaciotti Morales, P. (2022). [Tweeting apart: Democratic backsliding, new party cleavage and changing media ownership in Turkey](#). *Party Politics*, 13540688221135019.

If you want to look at the kind of software tools we develop at médialab, take a look at our [tools page](#), or our [Github repository](#).