

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in Germany.

The new **Center for Synergy of Systems (SynoSys)** develops transdisciplinary approaches and methods in the fields of network science, data science and citizen science in order to conduct integrative research into complex phenomena at the interfaces between biomedicine, social sciences and life sciences. SynoSys will contribute to the emergence of a scientific vision for healthy human development in which physical and mental health are collectively considered in an increasingly digital and networked social and physical environment. As part of SynoSys the Research Group **Computational Social Science** is focused on the societal impact of digitalization. The group aims to better understand the dynamics of the complex dissemination of information online and its impact on culture, political behavior and democracy. We employ a broad set of methods, spanning agent-based modeling, time-series analysis, network science and natural language processing, to behavioral experiments in the lab and in the field. Data sources are diverse, either collected from online platforms, recruited participants or data donation approaches. To cover this spectrum, we aim for an inherent transdisciplinary approach and methodological innovation.

For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Center Synergy of Systems (SynoSys)**, the **Research Group Computational Social Sciences** offers, subject to the availability of resources, a position as

Research Associate / PhD Student / PostDoc (m/f/x)

(subject to personal qualification, employees are remunerated according to salary group E13 TV-L)

starting at the **earliest possible date**. The position is limited until September 30, 2029 and part of the project **TRACE: Transparent Research on Algorithmic Content Exposure in Europe**, which is funded by the Mercator Foundation. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

Tasks: The project will include scientific research and collaboration with the Institute of International Law, Intellectual Property and Technology Law at TUD to draft applications for accessing research data under the Digital Services Act Article 40. The core task will be to analyze the resulting data sets, focusing on the causal inference of algorithmic influence on content dynamics and offline outcomes. Other tasks include writing of scientific publications for relevant Journals, conducting detailed literature searches, participating in professional conferences, presenting the research and its projects.

Requirements:

- university degree in an area of applied computational sciences
- strong interest in working in a trans-disciplinary research environment at the interface of computer science, law and social sciences
- methodological interest in platform data and causal inference
- experience with the Digital Services Act and its data access rights
- proficiency in data science applications in Python or R
- ideally experience with NLP, large language models, longitudinal data and data privacy/anonymization
- ability to work in a collaborative interdisciplinary environment
- good command of spoken and written English

We offer: A unique opportunity to contribute to complex science research incl. topics like information propagation on social networks, the role of platform algorithms for societal risks.

- 30 days of paid annual leave and a year-end bonus payment; additional pension provision (VBL)
- a dynamic and international research environment with a high degree of creative freedom
- an interesting and responsible position where you will get to know the diverse tasks and developments in the research field and specific area of expertise
- flexible working hours and home office arrangements

- diverse offerings for health promotion and work-life balance, for example, through our family office or our health management program
- numerous opportunities for further education, including language courses, IT training, and seminars for professional development
- possibility to participate in the wide range of activities offered by the university sports program.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The university is a family-friendly university. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Application: Please submit applications containing all documents. The documents must be in English and contain:

- a letter of motivation for the application (cover letter)
- curriculum vitae including a list of publications
- if applicable an English summary of your dissertation or master thesis (max. 2 pages);
- degree certificate
- names and contact details of two references that we can contact.

Please submit your detailed application including the mentioned documentation quoting the **reference number w26-219** by **September 8, 2026** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal

<https://securemail.tu-dresden.de> by sending it as a single pdf file to synosys@tu-dresden.de or to:

TU Dresden, Center for Synergy of Systems (SynoSys), Dr. Philipp Lorenz-Spreen, Helmholtzstr. 10, 01069 Dresden, Germany.

Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.



TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN
concept



Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tu-dresden.de/karriere/datenschutzhinweis>.