Technische Universität Dresden - Center for Synergy of Systems (SynoSys), Junior Research Group Computational Social Science

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 new Junior Research Group Computational Social Science will focus on the societal impact of digitalization. The group aims to better understand the dynamics of the complex dissemination of information on large online platforms 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 platform APIs, recruited participants or data donation approaches. To cover this spectrum, we aim for an inherent transdisciplinary approach and methodological innovation. Philipp Lorenz-Spreen is leading the junior research group "Computational Social Science" at the Center Synergy of Systems. 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.

Research Associate / Postdoc (m/f/x)

At the Center for Synergy of Systems (SynoSys), the Junior Research Group Computational Social Science offers a project position as Research Associate / Postdoc (m/f/x) (subject to personal qualification employees are remunerated according to salary group E 13 TV-L) starting January 1, 2026. The position is limited until December 31, 2026 with the option of extension. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

City: Dresden; Starting date (earliest): At the earliest possible; Duration: The position is limited until December 31, 2026 with the option of extension.; Remuneration: subject to personal qualification employees are remunerated according to salary group E 13 TV-L; Reference number: w25-273; Closing date: 30/10/25

Working field

scientific research activities within the Junior Research Group Computational Social Science with the research topic of computational methods for studying social systems and their interaction with technology, with a focus on large language models and a strong interest in applying advanced methods for analyzing and classifying linguistic data and their dynamics from social media platforms, as well as chatbot interactions, as well as the spill-over between the two. Furthermore: writing of scientific publications in the relevant Journals; conducting detailed literature searches; participation in professional conferences and presentation of the research work and its projects; support of the center

for applications for third-party funding.

Requirements

— university degree in applied computational sciences
— strong interest in working in a trans-disciplinary research environment at the interface of computer science, and social sciences as well as methodological interest in natural language processing and large language models
— proficiency in data science applications in Python or R
— ability to work in a collaborative interdisciplinary environment
— good command of spoken and written English
— ideally experience with NLP, longitudinal data and data privacy/anonymization

What we offer

A unique opportunity to contribute to complex science research incl. topics like information propagation on social networks, the dynamics of language or the emergence of polarization.
— 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

Application

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified 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.
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 (max. 2 pages)
— degree certificate.
Please submit your detailed application including the mentioned documentation quoting the reference number “w25-273” by October 30, 2025 (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.

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.

More information at https://stellenticket.de/198750/TUB/
Offer visible until 30/10/25