

Senior Postdoctoral Researcher in Computational Psychology / Human-Centered AI (m/f/d)

(Full time position for up to 3 years, preferred start March 1, 2025)

The **Data Science Lab of Prof. Lucie Flek** at the University of Bonn and the Lamarr Institute for Machine Learning and Artificial Intelligence, Germany, with an internationally visible profile in **natural language processing, large language models, and AI safety**, invites applications for a **Senior Postdoctoral Researcher** to join the **ERC-funded research project LLMpathy** (*Understanding the Interplay of Human Modeling and Social Intelligence via Large Language Model-Based Simulations*).

The project offers a rare opportunity to shape a new research direction at the intersection of **psychology and large-scale language models**.

LLMpathy is a five-year project funded by the **European Research Council (ERC)** and investigates how human psychological traits, values, beliefs and mental states can be quantitatively linked to the behavior of human-centered large language models. The project combines **large-scale longitudinal human studies** with LLM development, **simulation-based validity and reliability testing, and social intelligence evaluation**. The successful candidate will take a **leading methodological role in the design and evaluation of the human study** that provides the empirical foundation for **building and validating computational human models and socially intelligent AI agents**.

The position is embedded in a highly interdisciplinary research environment at the interface of psychology, computational social science, HCI, and NLP and within the Lamarr Institute's strong infrastructure for training, evaluating, and safety-testing large language models at scale. The [group](#) of Prof. Flek is part of major national and European research initiatives in AI and closely connected to international collaborations in LLM research, alignment, and human-centered AI, including the Max-Planck Institute for Human Development, the Stanford University's Human-Centered Artificial Intelligence (HAI) Center, and the Research Center Trustworthy Data Science (RC Trust),

We are looking for an outstanding candidate with a **doctoral degree in psychology, computational social science, cognitive science, HCI, or a closely related field**, and a strong quantitative or computational orientation. The ideal candidate has demonstrated expertise in **psychometrics, experimental design with human participants, and statistical data analysis**, as well as clear affinity to AI or NLP research. Prior experience with **longitudinal studies, digital behavioral data, computational modeling of human traits, or interdisciplinary projects involving machine learning** is desirable, as well as familiarity with ethical governance of human-subject research and data protection regulations (e.g., GDPR).

You will contribute to the **conceptual design, execution, and continuous evaluation of the large-scale longitudinal human study** underlying LLMpathy. This includes the operationalization of psychological constructs (e.g., personality traits, values, empathy, trust, impulsivity), selection and validation of psychometric instruments, and the design of experimental social interaction and decision-making scenarios. You will oversee data quality assurance, contribute to advanced statistical modeling of human behavior, and work closely with NLP and machine learning researchers to integrate human models into LLM training, evaluation, and simulation environments. Further responsibilities include the coordination of ethics and data protection procedures, supervision and mentoring of PhD students, preparation of high-impact publications, and active participation in international dissemination and open-science activities. Excellent scientific writing skills in English, a strong publication record, and the ability to work independently in an interdisciplinary setting are expected.

The position is **full-time (100%) for a fixed term of 2 or 3 years**, with a preferable start date on March 1 or April 1, 2026. The salary will be according to the German public service salary scale **TV-L E13/E14**, depending on qualifications and experience. The place of employment is **Bonn, Germany**. Remote employment is not possible.

We value and actively promote diversity in our team and therefore welcome all applications – regardless of age, gender, nationality, ethnic and social background, religion, worldview, disability, sexual orientation, or identity. Applications from women and non-binary candidates are explicitly encouraged. Applicants with severe disabilities will be given preference in the case of equal qualification and professional performance.

To apply, please submit a **CV**, a **motivation letter** describing your research interests and preferred topic area(s), a **short summary of previous research or projects**, and the **names of up to three referees** (if available) to flek@bit.uni-bonn.de.

The first application deadline is **December 13th, 2025**.
However, applications are reviewed on a **rolling basis** until all positions are filled.