

The Ruhr area, one of Europe's largest metropolitan regions, offers attractive career opportunities for excellent scientists and scholars from around the world. In 2021, Ruhr University Bochum, TU Dortmund University and the University of Duisburg-Essen established the Research Alliance Ruhr to bundle their cuttingedge international research on the most urgent challenges facing humankind. There are four research centers and a just the latest chapter college. This in our longstanding collaboration University Alliance as the Ruhr (UA community of 14,000 researchers and 120,000 students in the heart of Germany.

The Research Center Trustworthy Data Science and Security is looking for six full-time postdocs (part-time possible) to pursue independent research projects for two years. Payment according to public service's agreement: TV-L E14. The open PostDoc positions shall strengthen our interdisciplinary research team in any of the overarching research areas Psychology & Social Sciences, Artificial Intelligence & Machine Learning, Data Science & Statistical Learning, and Cybersecurity & Privacy and their interfaces.

# 6 PostDoc positions (2 Years) f/m/d

#### YOUR RESPONSIBILITIES

- Causal Inference
- Interpretable Machine Learning
- Fairness and Transparency of Intelligent Systems
- Mathematical and Statistical Theory of Machine Learning
- Privacy for the Digital Society
- Human aspects in Cybersecurity
- Cybersecurity and Machine Learning
- Reliability Guarantees for Artificial Intelligence
- Human-Al Collaboration
- Interactive Natural Language Systems
- Designing AI systems for diverse audiences
- User-centric Design of Speech and Text Assistants
- Human Understanding of Technology: Theory of the Artificial Mind
- Al-assisted Software Synthesis
- Formal Methods, Verification and Model Checking
- Reinforcement Learning from Data to Trustworthy Actions
- Automated Tuning of Parameters for Complex Machine Learning Models

We aim at both fundamental theoretical research as well as practical applications, even beyond the listed topics. Hence, we actively encourage you to apply also in other topics that bridge between our interdisciplinary research areas. Application domains include but are not limited to Autonomous Systems, Engineering, Medicine, Logistics, Social Sciences and Psychology.

## YOUR QUALIFICATIONS

- Excellent degree (doctorate) in psychology, statistics, computer science, mathematics, or similar programs
- High degree of creativity, commitment, analytical competence, and interdisciplinary teamwork
- Interdisciplinary research project with fundamental theoretical research or practical applications in data science

# WHAT WE OFFER

WHAT WE OFFER

We work in a multidisciplinary team on collaborative research projects jointly envisioned by leading international experts from different domains. We aim at both theoretical research as well as practical applications in close collaboration with academic and industrial partners. The position is embedded in a creative, attractive, and internationally renowned research environment. With your research, you will play a primary role in the development of our new Research Center and outreach with trustworthy technology to the general public. Our international network of researchers and industry partners ensures a seamless transition into your next career step as university professor or international research institutions. A balanced and family-friendly work-life relationship is important to us; thus, we offer options for flexible working times or part-time remote home-office.

#### **RESEARCH ALLIANCE RUHR**

The Research Alliance Ruhr is a joint undertaking of the three major universities in the Ruhr area and was initiated by the Ruhr Conference. The four research centers focus on "One Health Ruhr," "Chemical Sciences and Sustainability," "Trustworthy Data Science and Security," and "Future Energy Materials and Systems." In addition, the Research Alliance Ruhr has established a "College for Social Sciences and Humanities".

The Research Alliance Ruhr will appoint up to 50 research professors in the next few years and also offer numerous positions for research assistants. Join us now to create innovations for the world of tomorrow in Europe's densest university landscape, where you can find a wide range of scientific and industrial partners right on the doorstep.

# YOUR APPLICATION

If you are interested in the positions, please send your application (Ref-No. w39-23) until 2nd June 2023 to:

Research Center Trustworthy
Data Science and Security Technische
Universität Dortmund
Prof. Dr. Emmanuel Müller
Joseph-von-Fraunhofer-Str. 25
44227 Dortmund

open-positions@rc-trust.ai

Please provide the usual documents: motivation letter, CV, and copies of your certificates.

## CAREER OPPORTUNITIES

Our Research Center will hire 12 research professors in the next few years and offer numerous positions for research assistants and research group leaders. Join us now to create trustworthy innovations for the digital world of tomorrow in Europe's largest metropolitan region.

## **DIVERSITY**

The TU Dortmund University promotes diversity and equal opportunities. Convince us with your personality and expertise.

Applications from women will be given preferential treatment in accordance with the legal regulations. It is pointed out that the application of suitable severely disabled persons is desired.

# FURTHER INFORMATION

If you have any further questions, please contact:
Prof. Dr. Emmanuel Müller
https://rc-trust.ai







