Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Associate - permanent position acc to MAVO - salary grade E14 TV-L Berliner Hochschulen

part-time employment may be possible

If all personal and collective bargaining requirements are met, the employee will be placed in the specified pay group.

The Cognitive Psychology and Ergonomics Unit at TU Berlin (PI: Prof. Eva Wiese) is seeking a highly motivated and skilled postdoctoral researcher interested in conducting empirical, cutting-edge research focused on interactions between humans and artificially intelligent systems, such as robots. The goal is to use behavioral and neuroscientific methods to understand and characterize social, emotional and cognitive processes in dynamic, everyday human-AI interactions and compare them to human-human interactions. Suitable candi-dates will be part of an international and interdisciplinary team, conduct applied research on topics highly relevant to modern societies and develop empirically derived guidelines and principles that define how technology ought to be implemented to optimally support effective, meaningful and ethical human-AI interactions.

Faculty V - Institute for Psychology and Ergonomics / Department of Cognitive Psychology and Cognitive Ergonomics
Reference number: V-611/23 (starting at 01/10/23 / permanent / closing date for applications 20/10/23)

Working field:

- Teaching mandatory courses at the bachelor (e.g., Psychology for Engineers) and masters (e.g., Cognitive Psychology) level, as well as elective courses at the masters level (e.g., Human-Robot Interaction)
- Development of new courses, for instance, on explainable AI, ethical considerations in human-technology interaction or cognitive/mathematical modeling, methods in human-AI interactions
- Conception, implementation, execution and analysis of behavioral (e.g., reaction times) and neurophysiological (e.g., EEG, fNIRS, eye tracking) experiments with human participants on human-robot-interaction, explainable AI and embodied cognition
- Conception, development and maintenance of an Embodied AI laboratory at TUB, involving social robots (e.g., NAO), Virtual Reality, eye tracking, EEG and fNIRS
- Conception, preparation and publication of scientific articles in peer-reviewed journals
- Conception, preparation and submission of Ethics Committee Protocols
- Presentation of empirical research at international conferences
- Supervision of master theses in the Human Factors program
- Preparation, elaboration and revision of research proposals to national and inter-national funding agencies

Requirements:

- Successful completion of a PhD in psychology, human factors, human neuroscience, computer science or related areas
- As well as at least three years of academic or professional practice in a full-time employment relationship after completion of the higher education degree programme
- Demonstrably high capability to conduct hypothesis-driven empirical research in the laboratory using behavioral and neurophysiological methods in dynamic social interaction paradigms
- Very strong interest in theories and empirical research on human-robot interaction, embodied cognition and explainable AI
- Experience with programming behavioral and neurophysiological experiments with human participants (i.e., Psychopy, OpenSesame or similar)
- Experience with collecting behavioral (i.e., performance measures including eye movements metrics) and neurophysiological (EEG, fNIRS, EMG, etc.) data from hu-man participants
- Experience with statistical analysis of empirical data (e.g., R or Matlab)
- Ability to conduct independent and responsible scientific research following the Open Science principles
- Excitement to work in an international and interdisciplinary team
- Sufficient language proficiency to teach classes in German and/or English is required; willingness to learn either English or German is expected

Please send your application including **reference number** and application materials (motivation letter, CV, certificates; all in one pdf) **via email to Prof. Dr. Eva Wiese (eva.wiese@tu-berlin.de) and Christin Seidel (christin.seidel@tu-berlin.de)**.

By submitting your application via email you consent to having your data electronically processed and saved. Please

note that we do not provide a guaranty for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities.

Technische Universität Berlin - Die Präsidentin - Faculty V, Institute for Psychology and Ergonomics, Department of Cognitive Psychology and Cognitive Ergonomics, Prof. Dr. Eva Wiese, Secretary MAR 3-2, Marchstraße 23, 10587 Berlin

The vacancy is also available on the internet at
https://www.personalabteilung.tu-berlin.de/menue/jobs/