We currently have an opening for a

Postdoc (m/f/d)
(TV-L 13, full time, 2 years)

BAYESIAN INTENT PREDICTION FOR HUMAN-MACHINE COLLABORATION

The Cluster of Excellence "Data-Integrated Simulation Science" (EXC 2075) is an interdisciplinary research center with more than 200 scientists performing research towards a common goal: We target a new class of modeling and computational methods based on available data from various sources, in order to take the usability, precision and reliability of simulations to a new level.

THE PROJECT

The goal of this specific project is to contribute to the development of a new generation of human-computer interfaces that pro-actively adapt to users' future actions by predicting their interaction intentions. Specifically, the project will formulate and study intent prediction in a fully Bayesian framework. This approach will not only enable future interfaces to quantify and adapt to the inherent uncertainty of the intent predictions themselves, but will also leverage this information to improve subsequent predictions of users' actions.

YOUR TASKS

- Develop a mathematical framework for Bayesian intent prediction that can conceptually and computationally scale to realistic settings
- Build and empirically evaluate proof-of-concept implementations of the framework in the context of intelligent user interfaces (human-computer interaction)
- Contribute to other ongoing research projects within the host group, specifically a related ERC Starting Grant project
- Contribute to the teaching activities of the host group

WE ARE LOOKING FOR

We seek strong applicants with a Doctorate in Computer Science, Mathematics or a closely related field ideally with a specific focus on Machine Learning, Bayesian Statistics or Computer Vision. We value diversity and want to specifically encourage applications from underrepresented groups. Successful candidates should be curiosity-driven, ambitious, creative, and passionate about interdisciplinary research in the area of simulation and data sciences. Strong team working and critical thinking skills, aptitude for independent and creative work, as well as fluent English written and presentation skills are essential.

The position is fully funded (100%) and is available to applicants of any nationality. You will contribute to the leadership of ongoing projects, will have the opportunity to advise undergraduate and graduate students, and contribute to the teaching activities of the group.

If you are highly motivated and capable of addressing and solving scientifically difficult problems and if you are interested in doing research in an internationally oriented and highly successful team, you should send your application to jobs@simtech.uni-stuttgart.de.

Please submit your complete application by e-mail with one pdf attachment comprising a cover letter, academic CV, research statement, a full publication list, names and contact addresses of two referees, as well as academic certificates and transcript of records. If you have any

questions regarding this application, please contact Prof. Andreas Bulling (Andreas.Bulling@vis.uni-stuttgart.de).

We cannot reimburse any costs arising from the performance of job interviews.

The University of Stuttgart has been awarded “family-friendly employer”. Flexible working hours, regular child care services, and family-networks allow for a better combination of professional and family life. The University of Stuttgart also offers a range of services to enhance social equity (https://www.uni-stuttgart.de/en/university/profile/equality-diversity/). Additionally, a dual career program is in place to offer assistance to partners of those moving to Stuttgart. For more information, please visit https://www.uni-stuttgart.de/universitaet/arbeitgeber/dualcareer/

The University of Stuttgart is an equal opportunity employer. Applications from women are strongly encouraged. Severely challenged persons will be given preference in case of equal qualifications.

Information on the collection of personal data in accordance with Article 13 of the GDPR can be found via the following link: https://www.uni-stuttgart.de/en/privacy-notice/job-application/