Saarland University is a campus university with an international reputation for research excellence, particularly in computer science and in the life sciences and nanosciences. The university is also distinguished by its close ties to France and its strong European focus. Around 17,000 students, studying over one hundred different academic disciplines, are currently enrolled at Saarland University. Saarland University is officially recognized as one of Germany’s family-friendly higher-education institutions and with a combined workforce of more than 4000 it is one of the largest employers in the region.

The Department of Computer Science at Saarland University is inviting applications for the following position commencing in summer 2022 (can be negotiated).

**Academic research assistant (m/f/x)**

Reference number W2075, salary in accordance with the German TV-L salary scale\(^1\), pay grade: E-13 (see also https://oeffentlicher-dienst.info/c/t/rechner/tv-l/west?id=tv-l-2020&matrix=12); for 2 years initially, employment: 100 % of standard working time.

**Workplace/Department:**
The postdoctoral position at the Chair of Computer Science and Computational Linguistics. The postdoctoral position will be funded as part of the ERC Grant IDDISC “Individualized Interaction in Discourse” of Prof. Vera Demberg at Saarland University.
The goal of the position is to develop better statistical methods for modelling individual differences found in language processing datasets and further developing methods for automatically assigning individuals to latent groups.

**Job requirements and responsibilities:**
- The candidate should have a PhD degree in statistics, mathematics, computer science or a related area, and should have a strong publication record.
- The successful applicant must have excellent spoken and written proficiency in English.
- The job will involve comparing alternative statistical methods for discovering latent groups in data with properties such as typical psycholinguistic data (in terms of repeated measures design) and specifically properties that reflect data collection with many subjects and few observations per subject. An initial approach could consist of performing simulation experiments, see (e.g. Barr et al., 2013). Alternative statistical analysis methods to be analysed in the experiment are linear mixed effects models with analysis of the random effects structure, latent class analysis (McCutcheon, 1987), and Bayesian mixed effects model with different priors. The simulations will allow us to compare across a range of runs with different initializations and with different parameters, how likely the different model types are to recover the structure that underlies the data. Data observations from the

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\(^1\) TV-L = collective agreement on remuneration of public sector employees in the German Länder
experiments collected in other parts of the project will be used as a basis for constructing realistic data simulations. A further goal consists of exploring ways of setting up the statistical model to assess the stability in individual biases across time.

**Your academic qualifications:**
- Doctoral degree / PhD. The candidate should have a PhD degree in statistics, mathematics, computer science or a related area.

**The successful candidate will also be expected to:**
- Although the job does not come with any teaching obligation, you can however choose to participate in teaching activities.
- Applicants are requested to submit their application including a cover letter that specifies why you would like to work on this topic and what qualifies you for it, an academic CV, a list of academic publications, your PhD thesis (or a current draft), copies of academic degree certificates and names of two potential references.

**What we can offer you:**
- A flexible work schedule allowing you to balance work and family
- A broad range of further education and professional development programmes
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Jobticket')

We look forward to receiving your application. Please quote reference number W2075 when applying. Applications must be received by no later than 21. June 2022 and should be sent via email directly to Prof. Vera Demberg: vera(at)coli.uni-saarland.de

Frau Prof. Dr. Vera Demberg
Saarland University
Chair of Computer Science and Computational Linguistics
Campus C7.2
66123 Saarbrücken

The position is open until filled, but we will start to review applications from May 1st.
If you have any questions, please contact us for assistance. Your contact: Prof. Vera Demberg (vera(at)coli.uni-saarland.de)

Saarland University is one of the leading centres for computer science and computational linguistics in Europe, and offers a dynamic and stimulating research environment. The group is affiliated with both the Department of Computer Science and with the Department of Language Science and Technology. Both departments are part of the Saarland Informatics Campus, which brings together 800 researchers and 2000 students from 81 countries.

We collaborate closely with the university’s Department of Computer Science, the Max Planck Institute for Informatics, the Max Planck Institute for Software Systems, and the German Research Center for Artificial Intelligence (DFKI). Our researchers and students come from all over the world, and our primary working language is English.

The Saarland University is an equal opportunities employer. In accordance with its policy of increasing the proportion of women in this type of employment, the University actively encourages applications from women. Women are given preference in cases of equal suitability, ability and professional performance.

Applications from severely disabled persons will be given preferential consideration in the event of equal suitability. Part-time employment is generally possible.

We welcome applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity.
Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale.

Unfortunately, costs for attending an interview at Saarland University cannot be reimbursed in principle.

When you submit a job application to Saarland University you will be transmitting personal data. Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung. By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.