The Department of Computer Science at the Technische Universität Darmstadt is offering a position for a

## Doctoral Researcher E13, 100% (Full-Time Research Assistant / PhD Student) in Natural Language Processing

For doing cutting-edge research in the area of representation learning for discourse analysis. The full position is foreseen to start from October 1, 2020<sup>1</sup> for the duration of up to 3 years.

You will be part of the newly forming research group of Prof. Dr. Lucie Flek, conducting independent research on the project "Dynamically Social Natural Language Processing for Online Discourse Analysis", funded by the Federal Ministry of Education and Research (BMBF).

The project focuses on modeling the discourse aspects together with the deep contextual representations of user characteristics and latent social network profiles derived from online dialogues. The project further envisions the use of transfer and multitask learning techniques across a range of NLP tasks related to social discourse (such as opinion detection, sentiment analysis, hate speech identification, argument persuasiveness prediction, and rumor evaluation in social media), in order to better understand similarities between these tasks, and to scale to multiple languages. The innovative user representations, developed in this project, will also find future applications in the area of dialog modeling, improving quality and coherence of human-machine conversations.

The Department of Computer Science of the TU Darmstadt is regularly ranked among the top ones in respective rankings of the German universities. Its unique profile around AI (cf. <u>https://www.ai-da.tu-darmstadt.de</u>) emphasizes NLP, multimodal information processing, machine learning, and their great potential for the industry and society at large. The selected candidates enjoy numerous opportunities for professional growth, leading to successful faculty careers or exciting industrial employments.

## Your profile

You are self-motivated, reliable, creative, can work independently, can discuss/write/present scientific results in English, and want to do excellent research on challenging scientific problems with practical relevance. You have a background in Computer Science with a specialization in Machine Learning or Natural Language Processing. Prior experience with neural network architectures, with text representations such as word embeddings and contextual word embeddings, and with social network data is a plus. Demonstrable strong programming skills, e.g. through previous projects, are highly appreciated.

<sup>&</sup>lt;sup>1</sup> subject to the granting of subsidies

The position assumes you will be eligible for moving to Darmstadt or a nearby German location by the end of 2020. It is currently not possible to provide remote employment opportunities that would allow you to work from another country.

The Technische Universität Darmstadt wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates from underrepresented groups. Female candidates are strongly encouraged to apply. In case of equal qualifications applicants with a degree of disability of at least 50 or equal will be given preference. Wages and salaries are given by the collective agreements on salary scales, which apply to the Technische Universität Darmstadt (TV-TU Darmstadt).

## Application procedure

Your application, in English, must be submitted electronically to <u>flek\_e@ukp.informatik.tu-darmstadt.de</u> and must include the following documents in PDF format:

- Motivated letter of application (max. one page)
- CV incl. education, experience, language skills and other skills relevant for the position
- Diploma and transcripts of records: Master's degree diploma (including grade transcripts for bachelor's and master's degrees). If not completed, a certified/signed copy of a recent transcript of records or a written statement from the institution or supervisor will do. Applicants with a Master's degree from abroad should also enclose a short description of the grading scale used.
- Publication list (if available)
- Other information to consider: References and recommendations (if available)

The deadline for submitting the applications is **August 15th, 2020**.