The German Research Center for Artificial Intelligence (DFKI) is Germany's leading business-oriented research institution in the field of innovative software technologies based on artificial intelligence methods. The DFKI is one of the most important "centers of excellence" in the international scientific world and is currently the world's largest research center for artificial intelligence and its applications in terms of the number of employees and third-party funds. The DFKI works closely with national and international companies.

Post-doc (m/f) in Machine Learning for Translation and Translation Technology

The Universität des Saarlandes (UdS, www.uni-saarland.de) and the German Research Center for Artificial Intelligence (DFKI, www.dfki.de) are opening a post-doctoral position (post-doc) in:

“Neural Feature and Representation Learning for Translation and Translation Technology”.

The position is funded by the Collaborative Research Cluster (CRC) "Information Density and Linguistic Encoding" (SFB 1102 www.sfb1102.uni-saarland.de/) Project B6 at UdS and the DEEPLEE project (https://www.deeplee.de/) at DFKI. The projects are complementary in methodology and objectives and are led by the same PIs. Successful applicants will be employed both at UdS and DFKI, with separate contracts.

Responsibilities: fundamental research, publication of research outcomes, ML software development, contribution to supervision and teaching

Requirements: PhD in language technology, computer science, machine learning (or similar); strong background/publications in MT/NLP, machine learning, deep learning; strong problem solving and programming skills, independent and creative thinking; strong team working and communication skills, excellent command of written and oral English

Command of German/other languages helpful, but not a requirement.

Application deadline: 28th February 2019

Start date: as soon as possible

Location: UdS and DFKI, Campus Saarland University, Saarbrücken, Germany

Duration: at DFKI 50% until Sep 30, 2020; the UdS contract will be 50% until Sep 30, 2020 and then full-time for a total duration of 24 months.

Research:

SFB B6: translated text shows characteristics that distinguish it from comparable text originaly authored in the target language. These characteristics are often referred to as "translationese". Machines (ML) are good at distinguishing originally authored from translated texts. To date research has mostly focused on traditional human feature-engineering based supervised ML for translationese classification. Research objectives: investigate (i) the performance of deep learning based representation learning, (ii) whether the features/representations learned support linguistic

Prof. Dr. Josef van Genabith
DFKI GmbH
Research Department of
Multilinguality and Language Technology
Saarland Informatics Campus D3 2
66123 Saarbrücken

Phone: +49 (0)681 85775 5282
Email: mlt-sek@dfki.de
Web: http://www.dfki.de

and/or information-theoretic interpretations (e.g. Shannon surprisal, information density), (iii) whether insights obtained can improve (N)MT.

DFKI Deeplee: given enough data, neural approaches often outperform alternative approaches in NLP. Research objectives: (i) carry out foundational research in neural machine translation (NMT), including (ii) NMT architectures, (iii) use of data, (iv) inclusion of (external) knowledge sources and (iv) explainability of models.

The successful applicant will work in the Collaborative Research Cluster "Information Density and Linguistic Encoding" in the Language Science and Technology (LST) Department at the UdS, and the Multilinguality and Language Technology (MLT) Lab at DFKI. Both LST and MLT are leading centres for language technology research and provide dynamic and stimulating international research environments.

The UdS Campus hosts top-ranked collaborating research institutions including the German Research Centre for Artificial Intelligence (DFKI), the Max Planck Institute for Informatics (MPI-INF), the Max Planck Institute for Software Systems (MPI-SWS), the Helmholtz Center for Computer Security (CISPA), the Center for Bioinformatics (CBI) and the Computer Science Department.

Applications should include: short cover letter, CV, list of publications, brief summary of research interests, contact information for two references.

Please send your electronic application (PDF) to Dr. Raphael Rubino (raphael.rubino@dfki.de) and Prof. Josef van Genabith (josef.van_genabith@dfki.de) referring to the position 19/JvG. The position remains open until filled.

Prof. Dr. Josef van Genabith
DFKI GmbH
Research Department of
Multilinguality and Language Technology
Saarland Informatics Campus D3 2
66123 Saarbrücken

Phone: +49 (0)681 85775 5282
Email: mlt-sek@dfki.de
Web: http://www.dfki.de