The Research Training Group (RTG) "Integrity and Collaboration in Dynamic Sensor Networks (i.c.sens)" invites applications for **7 positions** of a

Doctoral Researcher (m/f/d)
Navigation, Computer Vision, Geoinformatics
(Salary Scale 13 TV-L, 100 %)

starting December 1, 2022. The positions are limited to 3 years.

Responsibilities and duties
The Research Training Group is dedicated to investigating techniques that can ensure the error-free operation of technology in the context of the ever-increasing interactions between humans and robots (e.g. autonomous vehicles, industry and service robotics). A unique combination of experts at Leibniz University Hannover provides ideal conditions for the solution of the research problems to be tackled in the context of the RTG. PhD candidates will work on the methodological basis as well as on the implementation of concepts for integrity and collaboration for dynamic sensor networks in connection with digital maps.

Projects:
- Improved perception of the environment using convolutional neural networks
- Uncertainty Estimation for Multi-view Stereo Reconstruction
- Stereo-based pedestrian tracking and re-identification from moving sensors
- Safety and integrity measures for GNSS velocity and time in dynamic sensor networks
- Development of a Collaborative Robust Particle Filter for State Estimation with Stochastic and Quantity-based Uncertainties in Sensor Networks
- Predicting behavior of objects and phenomena and storing them in maps
- Uncertainty modelling in LiDAR scene segmentation using neural networks

We offer an attractive position in an interdisciplinary team working in a highly relevant topical field of research, which provides excellent opportunities for further professional qualification. The structured supervision program is designed to allow for a graduation within three years.

Employment conditions
To qualify for the position, applicants should hold a university science degree (M.Sc.) in geodesy and geoinformatics, information technology, computer science, applied mathematics, aerospace engineering, robotics, or a related discipline. Furthermore, the ability for interdisciplinary and independent work as well as a very good command of the English language and a passion for learning German are required. Additional specific requirements are related to the topics of the individual PhD-projects.

Leibniz University Hannover considers itself a family-friendly university and therefore promotes a balance between work and family responsibilities. Part-time employment can be arranged upon request.

The supervisors of the Research Training Group will invite suitable candidates for an interview to be held on July 5, 2022 in Hannover, Germany or via Skype. Further details about the RTG, especially about the PhD topics and supervisors, can be found on the website of the RTG at: https://www.icsens.uni-hannover.de/en/

Applications have to include a CV, the full academic record (certificates, transcript of record of B.Sc. and M.Sc. or equivalent in English or German language), as well as a research statement (one page) indicating your specific interest in one of the 9 research topics of the RTG, highlighting your personal interest and strengths for a specific PhD topic, as well as initial research ideas concerning this topic.

Please send your application in German or English language until June 10, 2022 in electronic form (PDF) to

Email: icsens@ife.uni-hannover.de

or alternatively via postal mail to:
Gottfried Wilhelm Leibniz Universität Hannover
Institut für Erdmessung
Att. Dr. Katja Lohmann
Schneiderberg 50, 30167 Hannover
GERMANY
http://www.uni-hannover.de/jobs

For further information, please contact Prof. Dr.-Ing. Steffen Schön (Tel.: 0049 (0)511 762-3397, Email: schoen@ife.uni-hannover.de).