

Leibniz Universität Hannover

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

Doctoral Researcher on GNSS-based Navigation (m/f/d) (Salary Scale 13 TV-L, 100 %)

starting December 1, 2019. The position is 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. Many tasks are better solved in collaboration of such systems rather than by each system separately. In the future, collaborative sensor networks that can guarantee integrity will be core components of automated or autonomous vehicles, in order not to endanger their environment. A unique combination of experts at Leibniz Universität 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.

In this PhD project, the GNSS error budget in urban area will be investigated in details based on existing and new dedicated measurement campaigns. Error bounds in form of intervals have to be derived to assess and propagate the uncertainty in an alternative way and to detect inconsistencies between measurements. The obtained results will be compared with classical strategies to guaranty integrity such as RAIM.

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 M.Sc. degree in geodesy and geoinformatics, 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. Sound experience in GNSS measurements, processing and analyses as well as programming and simulations in MATLAB are expected. Part-time employment can be arranged on request.

As an equal opportunities employer, Leibniz University Hannover intends to promote women and men. For this reason suitably qualified women are specifically invited to apply. Preference will be given to equally qualified applicants with disabilities.

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Further details about the RTG, especially about the PhD topics and supervisors, can be found on the website of the RTG at: <u>www.icsens.uni-hannover.de</u>

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 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 in electronic form (PDF) until September 22, 2019 to

Email: icsens@ife.uni-hannover.de or by post to:

Gottfried Wilhelm Leibniz Universität Hannover

Institut für Erdmessung Att. Dr. Katja Lohmann Schneiderberg 50 30167 Hannover <u>http://www.uni-hannover.de/jobs</u>

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

Information on the collection of personal data according to article 13 GDPR can be found at <u>https://www.uni-hannover.de/en/datenschutzhinweis-bewerbungen/</u>.