



# PhD position

(full time - 39 months)

## Precise Orbit Determination of Agile and Non-agile Satellites

The Institute of Navigation (INS) at the University of Stuttgart, Germany, is looking for a highly motivated PhD student, who will work on the development of GNSS based precise orbit determination (POD) of agile and non-agile satellites. Research includes a review of POD algorithms, implementation and experimental testing of state-of-the-art approaches and development of novel and agile approaches which enable automation of satellite operations. This position is embedded within a research project that is being carried out in close cooperation with our partner Airbus Defence and Space GmbH in Friedrichshafen, Germany.

Tentative start date: Oct 1st, 2020

Duration: 39 months (with the possibility of extension)

Position type: PhD researcher (TV-L E13, 100%), work place splits between INS, Stuttgart and Airbus, Friedrichshafen

### We offer

- the possibility to obtain a PhD degree with very close ties to space industry,
- the chance to work in a research team of worldwide partners,
- the possibility to present results on national and international conferences and communicate your outcomes to a wide public audience,
- access to continuous learning and
- the chance to work on your personal and professional development, e.g. through participation in transferable skill courses.

### Your expected profile

- MSc degree in the fields of aerospace engineering, geodesy, physics, maths or electronic engineering
- knowledge about GNSS and orbit determination
- skills related to parameter estimation (least squares adjustment, Kalman Filter, etc.)
- excellent programming skills (C/C++ and Matlab/Simulink skills required)
- willingness to publish and present scientific results.
- highly motivated team player who is willing to contribute crucial components to complex scientific topics and connect to the space industry

The University of Stuttgart is an equal opportunity employer and strive for gender diversity. We welcome applications from all backgrounds. We are committed to increasing the number of individuals with disabilities in our workforce and therefore encourage applications from such qualified individuals.

Interested candidates may contact Prof. Hobiger ([thomas.hobiger@nav.uni-stuttgart.de](mailto:thomas.hobiger@nav.uni-stuttgart.de)) for further information or visit our homepage [www.nav.uni-stuttgart.de](http://www.nav.uni-stuttgart.de).

Applications including a motivation letter, a CV, 1-2 recommendation letters, transcripts and any other relevant documents should be sent in electronic form or by surface mail to

*Prof. Hobiger, Institute of Navigation, University of Stuttgart, Breitscheidstrasse 2, 70174 Stuttgart, Germany.*

