



## PhD/Postdoc: Engineering of AI-enabled Aerospace Systems



Flying has been one of the safest modes of transportation for decades thanks to its high quality standards throughout the development, testing, operation, maintenance and inspection of aircraft. AI technologies could revolutionize the aerospace industry. Unmanned aerial vehicles are already a reality. Autonomous delivery drones, flying taxis and similar applications could soon follow. However, due to safety concerns, such technologies have rightly not yet been adopted in the aerospace industry.

In the **Advanced Methods for Certification** Group, we work on engineering methods for development of AI-enabled systems that are safe, secure and reliable enough for being used in safety-critical applications.

### Aerospace Engineering and Geodesy Faculty

The faculty is an internationally outstanding position because we connect fundamental aviation technologies, space travel, and geodesy. With 2000 students, 14 institutes, 34 professors, and a long tradition from 1956, our study programs and research cover a wide range of topics, including mission analysis, flight control, systems engineering, aerodynamics, thermodynamics, material and structural development.

### Project

The research to be conducted should help to create engineering processes and methods for developing aerospace systems that correspond to aerospace safety criteria. Currently we are focusing on AI areas:

- Symbolic/ Probabilistic planning
- Development and operational explainability
- Human-Maschine Interaction

### Profile

- PhD in either computer science or engineering.
- Highly motivated with problem solving skills and result-oriented thinking.
- Collaborate well in a team environment and has interest of leading teams.
- Proficient oral and written communication skills and fluent in English.
- Experience in aerospace engineering is a bonus.

### Offer

- Fixed-term contract for 1 year with the possibility of renewal for up to 5 years (contingent on performance and availability of funding)
- Offered is a full position paid according to the German tariff (TV-L 13).
- Starting date: As soon as possible

We are committed to increasing the number of women employed in scientific positions. Women are therefore explicitly encouraged to apply. Severely disabled persons are given priority in the case of equal qualification.

### Application info

- Cover letter with the description of your research achievements and interests
- Detailed CV
- Transcripts of all degrees (German or English)
- Names and contact information of 3 references
- 2-3 representative publications
- **Deadline:** August 31, 2023
- **Contact:** [zamira.daw@ils.uni-stuttgart.de](mailto:zamira.daw@ils.uni-stuttgart.de)
- **Website:** <https://www.ils.uni-stuttgart.de/en>