

At the Institute for Autonomous Systems Technology, Department of Aerospace Engineering, University of the Bundeswehr Munich, we are offering a position as a

Research Assistant / PhD Student
Topic: Situational Analysis, Navigation and Behavior
full-time, civilian, salaried according to TvöD 13.

We have been working in the field of autonomous driving for over 30 years and were pioneers in the visual guidance of autonomous road vehicles with our 4D approach. Using our current research platforms (see photos below), we successfully participated in various international competitions (Urban Challenge 2007, European Land Robot Trials). The driving force of our success is the commitment and team spirit of about 15 PhD Students.

Due to the ever increasing number and scope of our research projects, we need to expand our team. Applications of our research include modern driver-assistance systems as well as autonomous robotics tasks, such as in rescue and transport scenarios. Please contact us if you would like to work in this area; we will be glad to provide further details regarding the projects upon request.

Within the scope of this project, novel methods for navigation in unknown or unstructured environments are to be developed and tested on our vehicles. These include, among other things, analyzing complex situations and making decisions that serve as basis for the following trajectory planning.

Prerequisites for employment:

- Above-average academic degree in the field of
 - computer science, e.g., with a focus on robotics, AI or machine learning
 - electric engineering, e.g., with a focus on robotics, mechatronics or control engineering
 - mechanical engineering, e.g., with a focus on robotics, mechatronics or control engineering
 - or in a comparable field of study
- Knowledge or interest in at least one of the following areas
 - Behavior generation / decision making
 - Machine learning
 - Path planning
- Programming skills are required (C or C++)
- Experience with ROS is beneficial
- Enthusiasm for engineering and experimental work on real vehicles
- Willingness to participate in teaching

Suitable candidates will have the opportunity to obtain a PhD as part of their work. Applicants who already have a doctorate cannot be considered.

Please send your complete application including a CV (in a single PDF file) to:

Univ.-Prof. Dr.-Ing. Hans-Joachim Wünsche
Institut für Technik Autonomer Systeme
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D-85577 Neubiberg, Germany
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Further information is available at www.unibw.de/tas and www.youtube.com/user/unibwtas



The University of the Bundeswehr Munich offers trimester-based intense degree programs in small groups, in which (also civilian) students can complete a state-approved Master's within four years. According to Humboldt's ideal, it is not only a teaching but also a researching university, whose professors, as at other German universities, are free to choose their research topics. As a campus university with very good financial and technical equipment, excellent sports facilities as well as its own daycare center and kindergarten, it offers optimal prerequisites for efficient research.

The University of the Bundeswehr Munich aims to increase the ratio of female scientists. Women are therefore explicitly invited to apply. Disabled applicants with the same level of qualification will be given special consideration.