

Hier  
entsteht  
Zukunft!



Saarland University is a campus university with an international reputation for research excellence, particularly in computer science and in the life sciences and nanosciences. The university is also distinguished by its close ties to France and its strong European focus. Around 17,000 students, studying over one hundred different academic disciplines, are currently enrolled at Saarland University. Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4000 it is one of the largest employers in the region.

The Chair of Systems Modeling and Simulation is inviting applications for the following position commencing **at the earliest opportunity**

### Academic research assistant (m/f/x)

**Reference number W1687**, salary in accordance with the German TV-L salary scale<sup>1</sup>, pay grade: E13 TV-L, employment: 3 years, 100 % of standard working time.

#### Workplace/Department:

Become a member of our group at the newly founded Chair of Systems Modeling and Simulation! We are part of the Systems Engineering Department working on the modeling, simulation, and optimization of dynamical systems. Our focus is on the development of novel, efficient, numerical methods as well as on engineering applications thereof. In our autonomous driving research, we combine optimal control methods with trajectory planning via motion primitives and machine learning approaches.

#### Job requirements and responsibilities:

- Research in optimal control, model-based optimization and trajectory planning. Design of novel numerical methods focussing on autonomous driving applications
- Research projekt GROKO-Plan: Graph-based optimal and cooperative trajectory planning for interacting automobiles, which is part of the DFG (German Science Foundation) priority program "Cooperatively Interacting Automobiles" (see [coincar.de](http://coincar.de))
- Obtaining teaching proficiencies, assist in teaching and general responsibilities of the working group including e.g. acquisition of new projects
- Opportunity to pursue a doctoral degree is offered.

<sup>1</sup> TV-L = collective agreement on remuneration of public sector employees in the German *Länder*

The pay grade assigned to an employee depends on their professional qualifications and the number of years of service. Each pay grade is further subdivided into levels. Entry-level employees with no previous experience will initially be assigned a level 1 rating. After one year at level 1 of the E10 pay grade, an employee will move up to level 2. After a further two years, the employee will move to level 3, etc.

### Your academic qualifications:

- Completed scientific university studies in systems engineering, (industrial/applied) mathematics, computer studies, electrical/mechanical engineering, mechatronics, physics or comparable fields of studies

### The successful candidate will also be expected to:

- Provide a (master) degree with outstanding achievements
- Have experience in one or more of the following areas
  - Modeling of mechanical/mechatronic systems, e.g. in vehicle dynamics or robotics
  - Optimization or Machine Learning methods
  - Optimal control or graph-based planning methods
  - Autonomous driving, cooperative systems or communication networks
- Have experience in programming e.g. with MATLAB, C/C++, Python
- Possess a quick comprehension of complex tasks and interested in gaining a deep understanding of new topics
- Be a teamplayer, have organizational competences as well as high engagement
- Have very good proficiency of English and (if applies) interest in learning German

### What we can offer you:

- A flexible work schedule allowing you to balance work and family
- A broad range of further education and professional development programmes
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Jobticket')

We look forward to receiving your **(written) application**. Please quote **reference number W1687** when applying. Applications must be received by no later than **24 April 2020** and should be sent to the following address:

Universität des Saarlandes

Frau Prof. Dr. Kathrin Flaßkamp

Systems Modeling and Simulation

Campus building A5 1

66123 Saarbrücken

Email: [kathrin.flasskamp@uni-saarland.de](mailto:kathrin.flasskamp@uni-saarland.de) (Applications via email are very welcome!)

Application documents will not be returned. Please only submit copies of your documents and do not use plastic wallets, folders, ring binders, etc.

If you have any **questions**, please contact us for assistance. Your contact:

Frau Prof. Dr. Kathrin Flaßkamp

Secretary Frau Ute Flieger

Tel.: +49 681 302 4416

In accordance with the objectives of its equal opportunities plan, Saarland University seeks to increase the proportion of women in this field. Qualified women candidates are therefore strongly encouraged to apply. Preferential consideration will be given to applications from disabled candidates of equal eligibility. The successful candidate has the option of choosing to work part-time in this position.

Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale.

When you submit a job application to Saarland University you will be transmitting personal data. [Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung](#). By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.