



Karlsruhe Institute of Technology



KIT | Institute AIFB | P.O. Box 6980 | 76049 Karlsruhe, Germany



**Institute of Applied Informatics
and Formal Description Methods**

Dr. Min-Bin Lin

Kaiserstraße 89
76133 Karlsruhe, Germany

Phone: +49 721 608-44753

Fax: +49 721 608-46581

Email: min-bin.lin@kit.edu

Web: www.aifb.kit.edu

Date: 2024-03-01



To all interested students,

Student Research Assistant (HiWi)

Job Description:

The research assistants will support the scientific staff of the Systems, Data, Simulation & Energy (SYDSEN) and Cooperative Autonomous Systems (CAS) research groups on the **Project Tyre Road Noise-- Data-based study of effects on controlled and real drive noise emission** funded by the German Federal Ministry of Digital and Transport, BMDV. We specialize in WP 6 of the project, dedicated to the preparation and advancement of (AI) methodologies, focusing on research in statistical and machine learning techniques for noise modeling and analysis of determinants. Moreover, our research endeavors will extend to simulation methodologies, i.e. agent-based simulation.

The tasks include:

- Research on quantitative methods for road traffic noise modeling
- Literature review on agent-based simulation, i.e. statistical inference
- Communication with project partners and demonstrators
- Documenting all tasks and outcomes

Qualifications and Skills:

We seek highly motivated Bachelor's or master's students in computer science, industrial engineering, economics and finance, or related fields, preferably at KIT.

- Proficiency in Python, R
- Basic understanding of data science
- Bonus: familiarity with time series analysis, transportation science
- Strong communication skills for collaboration with diverse project partners
- Adequate English language proficiency for international teamwork.

We offer:

- A part-time contract offering 60 hours per month, with a salary tailored to the level of educational attainment. The initial contract duration is flexible, ranging from 3 to 6 months, with the high potential for extension.
- Flexible working hours, also working at home possible.
- A variety of tasks so that you can learn a lot. Also, state-of-the-art research can be performed and will be published together with the student.

The payment is based on the rates of the state of Baden-Württemberg for academic assistants. The employment is temporary.

Visitor Address:	Postal Address:
Karlsruhe Institute of Technology	Karlsruhe Institute of Technology
Institute AIFB	Institute AIFB
Kaiserstr. 89, Bldg. 05.20	P.O. Box 6980
76133 Karlsruhe, Germany	76049 Karlsruhe, Germany