

The Technology Network Allgäu (TNA) founded in 2016, is now focusing on the areas of vehicle measurement technology and functional safety, under the institution of the University of Applied Sciences Kempten and is part of the Allgäu Research Center (FZA). We mainly concentrate on consulting, testing, validation and application-oriented development. For a specific research project, we are offering a Full/part-time job, Bachelor/Master thesis, Internship, Working student.

Safe innovation: 'Safety First' is the key to any development and is also a challenge. We are contributing by communicating, transferring knowledge with a ontology to fulfill the necessity of Functional Safety of new inventions, especially in the automotive & automation industry. Are you willing to join us!

## We are looking for:

**Bachelor/Master thesis, internship (Full time or Part-time) for  
"Scenario generation and scenario reduction methods optimization based on  
Probability Theory (Stochastic Process) for automated driving system"**

### Your Tasks:

- Identification of methods, theorems and algorithms in scenario generation and reduction
- Application of Scenario generation methods from state-of-the-art
- Optimal scenario generation techniques based on probability metrics
- Scenario tree construction based on scenario reduction
- Scenario Reduction Algorithms in Stochastic Programming
- Put forward mathematical models for automated driving system

### Our expectations:

- Analytical thinking and initiative
- Independent work, teamwork and communication skills
- Interest in mathematics (Probability)
- Programming Knowledge (C Programming)

### We Offer:

- Flexible working times
- Providing individual supervisor for support
- Attractive salary

If you are **interested**, we are looking forward hearing from you. If you have any questions and queries, please let us know Straight forwardly!

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