Knowtion GmbH
Amalienbadstr. 41 Bau 52, 76227 Karlsruhe
www.shiratech-knowtion.com

SHIRATECH KNOWTION

Working Student – Software Development in IoT / Industry 4.0 environment

We are looking for Working Students to implement mathematically sophisticated algorithms for sensor fusion and automatic data analysis in embedded software for the automated monitoring of manufacturing processes.

About Us

In pursuit of our mission to revolutionize manufacturing, we transform data into knowledge.

We are an international data science company, specialized in self-learning systems and AI, for data analysis and state prediction in complex systems.

Founded in 2011 originating from the Karlsruhe Institute of Technology (KIT), we deal with the development and implementation of AI solutions from embedded devices to cloud applications at our location in Karlsruhe. Our strength lies in the development and application of tailor-made algorithms for processing sensor and machine data (Industry 4.0).

We always focus on resource-efficient development and seamless integration into existing control and monitoring software. Our successes can be found in a wide range of industries, from medical technology and aviation to building technology and energy supply to means of transport and, last but not least, mechanical engineering. Our customers range from micro-enterprises to large international industrial groups.

What can you expect?

We offer you a diversified collaboration within exciting, international projects in an ambitious and fast-growing company offering a modern working environment as well as all the benefits of a successful startup including the possibility of a permanent position later on.

Your Tasks:

- Participation in the analysis of novel AI methods (e.g. from the field of one-shot learning) with regard to their suitability for embedded devices and current IoT / Industry 4.0 challenges
- Participation in the implementation and testing of different AI methods on existing data sets
- Participation in the optimization of AI methods with regard to the achievable quality and accuracy in test data sets

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- Participation in the adaptation of the software into embedded devices or cloud solutions
- Participation in the integration of the AI models into the overall system software

What do we expect?

- Ongoing master's degree in technical cybernetics, automation engineering, control engineering, computer science (University/UAS) or comparable course of study or a corresponding choice of focus
- Practical experience in programming with Java, Python and C++
- Profound knowledge in sensor fusion algorithms (e.g. Kalman filter, UKF) and machine learning methods (e.g. neural networks)
- Structured and solution-oriented work style, strong analytical skills and capacity for teamwork
- Reliability and high quality awareness
- Business fluent in German and English

Your Benefits!

- Flexible working hours alongside studies of 12-20 hrs. per week with the possibility to increase up to 40 hrs. per week during semester breaks
- Exciting research topics and their implementation into industrial solutions
- Optimal training and handling of varied tasks with a lot of room to maneuver
- Flat hierarchies, cooperation at equal level, room for new ideas
- Development opportunities through independent work, diverse feedback and networking opportunities, social responsibility and sustainable action
- Attractive, modern workplace in a growing company with excellent public transport connections in Karlsruhe
- Modern working environment with the option to flexibly switch between home office and attendance
- Free drinks: water, tea, coffee

Application

We look forward to receiving your application via email at: career@knowtion.de

Please send your application directly to the managing directors:

Dr. Frederik Beutler, *Vesa Klumpp* and *Dr. Thomas Kopfstedt*

If you have any further questions, feel free to contact us by phone at: +49 721 486 995-10