



May 09, 2023

The Institute of Digital and Autonomous Construction is seeking motivated and reliable student assistants, willing to support the team as soon as possible to actively support the activities of the institute. With this job posting, we are seeking candidates for a

## **Student assistant („Hiwi“) position (m/f/d) to support activities in the field of “Explainable artificial intelligence (XAI)”**

### **Your responsibilities**

- Developing classification algorithms that classify simultaneous sensor faults
- Embedding the classification algorithms in microcontrollers
- Conducting a literature review on applying XAI techniques to the classification algorithms
- Applying XAI techniques to the classification algorithms

### **Requirements**

- Currently enrolled in a relevant degree program (e.g. mechatronics, information and communication systems, civil engineering, etc.)
- Knowledge in programming languages, such as Python and MATLAB
- Knowledge in machine learning and artificial neural networks
- Interest in working with mathematics, statistics, and data science would be an advantage

### **Our package**

- Being part of an interdisciplinary and very motivated young team
- Possibilities to help shape the newly founded Institute for Digital and Autonomous Construction
- Direct access to new laboratories and modern infrastructure
- Many opportunities for conducting bachelor and master theses
- Direct contact to international top universities and strong industrial partners

*Your working hours and possible presence times may be arranged individually.*

To apply for this job, please send an email to Heba Al-Nasser ([heba.al-nasser@tuhh.de](mailto:heba.al-nasser@tuhh.de)), subject „XAI Hiwi“, and state briefly what qualifies you to be a successful candidate.

## **The Institute of Digital and Autonomous Construction at Hamburg University of Technology**

The Institute of Digital and Autonomous Construction, currently being established at Hamburg University of Technology, represents a central element of the growth concept of the Free and Hanseatic City of Hamburg. The institute is located in the Hamburg Innovation Port (HIP), the new technology and innovation center in Hamburg, and will address current and future issues of digitalization in civil engineering. For our young team, we are seeking motivated student assistants who are interested in creatively shaping the digitalization in the construction industry, together with strong partners in industry, at Hamburg University of Technology, and with partner universities in Germany and abroad.

