Master of Computer Science Data Science (m/f/d) with an interest in Production

The Institute of Forming Technology at the University of Stuttgart has been working for decades in the field of research and development of forming processes and procedures in sheet metal and solid forming at an international level. level. The research tasks and projects are funded both by the public sector and in direct bilateral cooperation with bilateral cooperation with industrial partners from the automotive industry, with suppliers of semi-finished products and also with well-known manufacturing companies and financed directly by them. The institute's expertise is characterized research, forward-looking digitalization approaches for selected forming processes, an excellently equipped forming processes, an excellently equipped test field and broad-based teaching in a university environment.

The state of Baden-Württemberg and the federal government are currently funding numerous research projects in the field of the further development and adaptation of cyber-physical system components for forming technology process chains. This includes new solutions for sensor data processing at high process speeds, application-oriented data pre-processing and subsequent feature engineering as well as new developments for the use of suitable AI networks for different machine learning strategies for different prediction functionalities of modern forming processes, such as for monopolar plates for fuel cells.

For the management / processing of these projects we are looking for a committed Master of Computer Science with an interest in production engineering development tasks between science and operational practice.

Your Tasks:
- Development, implementation and testing of Industry 4.0 solutions in the institute's production-equipped test field and also with partners
- Conception and implementation of suitable ML algorithms in the context of the hardware of the machine controls in forming technology
- Integration of sensors and actuators in forming tools/systems
- Signal analysis, data mining and feature engineering with a close customer focus

We offer you:
- Creative tasks between science and operational practice
- Independent work in a well-structured research environment
- Cooperation with renowned companies in the supplier industry
- Possibility of a doctorate for your personal development- Pleasant working atmosphere with motivated and friendly colleagues

Your Profile:
- Completed Master's degree in Computer Science; preferably with a focus on Data Science / AI
- Good knowledge of control and regulation technology
- Good written and spoken English skills
- Curiosity, independent way of working, logical thinking and ability to work in a team

Are you interested in a scientifically oriented, personal further qualification with the possibility of obtaining a doctorate (Dr.-Ing.) at the University of Stuttgart? We have an excellent network of development companies and service providers and work closely with numerous institutes of technical universities in Germany. An overview of the various research lines of the institute can be found on our website at www.ifu.uni-stuttgart.de.

The University of Stuttgart aims to increase the proportion of women in the scientific field and is therefore particularly interested in applications from women. Severely disabled persons will be given priority in case of equal qualifications. Employment is carried out by the central administration of the University of Stuttgart and is subject to the German Academic Fixed-Term Contract Act (WissZeitVG).

We look forward to receiving your online application, which you should send to Ms. Mellinger in the institute's personnel management at heidi.mellinger@ifu.uni-stuttgart.de.

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