



## Research Associate (m/f/d) in the research group "Process Chains and Forming Units" at the Institute for Production Engineering and Forming Machines at the TU Darmstadt

### Artificial intelligence in production – opportunities and challenges

*In recent years, the topic of artificial intelligence has increasingly become the focus of attention for manufacturing companies. This innovative technology offers new potential for value creation, especially in forming technology. At the Institute of Production Engineering and Forming Machines (PtU), we develop AI in forming technology in a holistic approach, including the transfer into industrial application.*

*The PtU is therefore looking for several scientific staff members who can make a decisive contribution to the establishment of AI and its application in practice.*

#### Your tasks

- Studies on AI-supported production in the development, implementation and testing of machine and deep learning approaches in forming processes
- Digitalization of forming processes in the industrial environment of typical companies as a basis for AI-supported production
- Transfer of AI applications into the real production environment under consideration of industrial boundary conditions by establishing transfer measures
- Active cooperation at the institute in the context of meetings, conferences, industrial visits and social events

#### Your qualification

- Knowledge in statistical analysis of large data sets and methods of machine and deep learning
- Proficient in common data analytic tools such as with Matlab, Python o. software
- Practical experience in the use of equipment and tools of forming processes especially for the generation of valid data sets
- Independent working method for planning, carrying out and evaluating experiments
- Business fluent in German and good command of English

#### Your perspectives

The PtU has excellent equipment for research and teaching and offers the latest hardware and software for conducting industry-oriented studies in the field of AI-supported production. In addition, successfully completed research projects in the field of digitization and machine learning in recent years have established a broad expertise in this field of technology. In a young team, they get the opportunity to take responsibility for their own projects in the field of AI in forming technology at an early stage. Through challenging and practical research projects with high scientific standards, we enable you to develop personally and, in addition to project-related theoretical, analytical and experimental investigations, to write a dissertation for the attainment of the Dr.-Ing. degree..

**The employment (full-time) according to TV-TU Darmstadt E 13 is initially limited to three years.**

If you are interested, we look forward to receiving your application (by e-mail).

If you have any further questions, please do not hesitate to contact us.

Please send your application to:

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