

Title

## **Trustworthy AI - Obligation or Entrepreneurial Opportunity?**

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Speaker/Company

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Abstract

Artificial intelligence (AI) is penetrating more and more areas of the economy and society, taking on increasingly responsible tasks. It is clear that the potential of AI can only be fully exploited if its use is technically reliable and if there is sufficient trust in the respective technologies. In general, it is to be expected that the requirements for the trustworthiness of AI systems will be shaped both by legal regulation (high-risk areas) and by the demands of the market. For example, AI-based automation can generate cost savings and competitive advantages. However, this is only true as long as the underlying AI works reliably and can identify uncertain predictions itself.

This talk will first provide an overview of requirements for the trustworthiness of AI systems, addressing recently published results of the AI standardization roadmap and the planned EU regulation. In a next step, the question of how AI risks can be systematically evaluated and mitigated will be highlighted. Methods for the technical validation of AI systems are presented, as well as examples of new tools with which technical quality properties of AI systems can be evaluated. Finally, practical examples are used to present the procedure for an AI assessment and the associated benefits for the assessed organizations.

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Biography

Dr Maximilian Poretschkin is team leader and Senior Data Scientist at the Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS), where he is responsible for activities in the field of safeguarding and certification of Artificial Intelligence (AI). In this function, Dr Poretschkin leads a large interdisciplinary research project that cooperates with the Federal Office for Information Security (BSI) to develop a certification of AI-systems. Further research interests include the development of tools to improve the quality of AI systems and methods to systematically assess AI-systems. Dr Poretschkin leads the DIN working group for certification and quality assurance of AI systems for the German standardization roadmap and regularly advises companies and federal authorities on the trustworthy use of artificial intelligence.

Dr Maximilian Poretschkin has many years of research and industry experience. Prior to his position at Fraunhofer, he worked as a consultant at the strategy consultancy Bain & Company and as a postdoctoral fellow at the University of Pennsylvania in Philadelphia. Dr Poretschkin studied physics and mathematics in Bonn and Amsterdam. He is the author of numerous scientific publications and an alumnus of the German National Academic Foundation and the Deutsche Telekom Stiftung.

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