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Certification of AI Systems

Discussion Paper

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The certification of Artificial Intelligence (AI) is considered a possible key requirement for promoting the use of AI systems in various areas of business and life. For many AI systems, certification can contribute to exploit the societal potential in a secure and public-interest oriented manner. A successful certification of AI systems enables the fulfilment of important social and economic principles, such as legal security (e.g. liability and compensation), interoperability, IT security or data protection. In addition, it can create confidence among citizens, lead to better products and influence the national and international market dynamics. In order to prevent certification procedures from becoming an obstacle to innovation, it is necessary to guarantee certain standards of AI systems, avoid over-regulation, enable innovation and, at best, initiate new developments for a European path in AI application. Experts from the working group IT Security, Privacy, Legal and Ethical Framework and the working group Technological Enablers and Data Science of Plattform Lernende Systeme have systematized potentials and challenges within the certification of AI systems in a discussion paper. The paper sheds light on the various technical, legal and ethical constraints and provides also an overview on existing initiatives for the certification of AI systems in Germany.

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