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Okvir za sisteme umetne inteligence (UI), ki temeljijo na strojnem učenju (ISO/IEC 23053:2022, popravljena različica 2025-12)

Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML) (ISO/IEC 23053:2022, Corrected version 2025-12)

Framework für Systeme der Künstlichen Intelligenz (KI) basierend auf maschinellem Lernen (ML) (ISO/IEC 23053:2022, korrigierte Fassung 2025-12)

Cadre méthodologique pour les systèmes d'intelligence artificielle (IA) utilisant l'apprentissage machine (ISO/IEC 23053:2022, Version corrigée 2025-12)

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Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML) (ISO/IEC 23053:2022, Corrected version 2025-12)

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Framework für Systeme der Künstlichen Intelligenz
(KI) basierend auf maschinellem Lernen (ML) (ISO/IEC
23053:2022, korrigierte Fassung 2025-12)

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European foreword

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INTERNATIONAL
STANDARD

ISO/IEC
23053

First edition
2022-06

**Framework for Artificial Intelligence
(AI) Systems Using Machine Learning
(ML)**

*Cadre méthodologique pour les systèmes d'intelligence artificielle (IA)
utilisant l'apprentissage machine*

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ISO/IEC 23053:2022(E)

Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 42, *Artificial Intelligence*.

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Introduction

Artificial intelligence (AI) systems, in general, are engineered systems that generate outputs such as content, forecasts, recommendations or decisions for a given set of human-defined objectives. AI covers a wide range of technologies that reflect different approaches to dealing with these complex problems.

ML is a branch of AI that employs computational techniques to enable systems to learn from data or experiences. In other words, ML systems are developed through the optimisation of algorithms to fit to training data, or improve their performance based through maximizing a reward. ML methods include deep learning, which is also addressed in this document.

Terms such as knowledge, learning and decisions are used throughout the document. However, it is not the intent to anthropomorphize machine learning (ML).

This document aims to provide a framework for the description of AI systems that use ML. By establishing a common terminology and a common set of concepts for such systems, this document provides a basis for the clear explanation of the systems and various considerations that apply to their engineering and to their use. This document is intended for a wide audience including experts and non-practitioners. However, some of the clauses (identified in the overview in [Clause 5](#)), include more in-depth technical descriptions.

This document also provides the basis for other standards directed at specific aspects of ML systems and their components.

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