



**SLOVENSKI STANDARD**  
**SIST EN ISO/IEC 22989:2023**

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**Informacijska tehnologija - Umetna inteligenca - Koncepti in terminologija umetne  
inteligence (ISO/IEC 22989:2022)**

Information technology - Artificial intelligence - Artificial intelligence concepts and  
terminology (ISO/IEC 22989:2022)

Informationstechnik - Künstliche Intelligenz - Konzepte und Terminologie der Künstlichen  
Intelligenz (ISO/IEC 22989:2022)

Technologies de l'information - Intelligence artificielle - Concepts et terminologie relatifs à  
l'intelligence artificielle (ISO/IEC 22989:2022)

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## Information technology - Artificial intelligence - Artificial intelligence concepts and terminology (ISO/IEC 22989:2022)

Technologies de l'information - Intelligence artificielle  
- Concepts et terminologie relatifs à l'intelligence  
artificielle (ISO/IEC 22989:2022)

Informationstechnik - Künstliche Intelligenz -  
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The text of ISO/IEC 22989:2022 has been prepared by Technical Committee ISO/IEC JTC 1 "Information technology" of the International Organization for Standardization (ISO) and has been taken over as EN ISO/IEC 22989:2023 by Technical Committee CEN-CENELEC/ JTC 21 "Artificial Intelligence" the secretariat of which is held by DS.

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## Information technology — Artificial intelligence — Artificial intelligence concepts and terminology

*Technologies de l'information — Intelligence artificielle — Concepts et terminologie relatifs à l'intelligence artificielle*

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## Introduction

Advancements in computing capacity, reduction of costs of computation, availability of large amounts of data from many sources, inexpensive online learning curricula and algorithms capable of meeting or exceeding human level performance in particular tasks for speed and accuracy have enabled practical applications of AI, making it an increasingly important branch of information technology.

AI is a highly interdisciplinary field broadly based on computer science, data science, natural sciences, humanities, mathematics, social sciences and others. Terms such as “intelligent”, “intelligence”, “understanding”, “knowledge”, “learning”, “decisions”, “skills”, etc. are used throughout this document. However, it is not the intention to anthropomorphize AI systems, but to describe the fact that some AI systems can rudimentarily simulate such characteristics.

There are many areas of AI technology. These areas are intricately linked and developing rapidly so it is difficult to fit the relevance of all technical fields into a single map. Research of AI includes aspects such as aspects including “learning, recognition and prediction”, “inference, knowledge and language” and “discovery, search and creation”. Research also addresses interdependencies among these aspects<sup>[23]</sup>.

The concept of AI as an input and output process flow is shared by many AI researchers, and research on each step of this process is ongoing. Standardized concepts and terminology are needed by stakeholders of the technology to be better understood and adopted by a broader audience. Furthermore, concepts and categories of AI allow for a comparison and classification of different solutions with respect to properties like trustworthiness, robustness, resilience, reliability, accuracy, safety, security and privacy. This enables stakeholders to select appropriate solutions for their applications and to compare the quality of available solutions on the market.

As this document does provide a definition for the term AI in the sense of a discipline only, the context for its usage can be described as follows: AI is a technical and scientific field devoted to the engineered system that generates outputs such as content, forecasts, recommendations or decisions for a given set of human-defined objectives.

This document provides standardized concepts and terminology to help AI technology to be better understood and used by a broader set of stakeholders. It is intended for a wide audience including experts and non-practitioners. The reading of some specific clauses can however be easier with a stronger background in computer science. These concerns are described primarily [Clauses 5.10, 5.11](#) and [8](#), which are more technical than the rest of the document.

