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GB/T 47175-2026

**Ergonomics of human-system interaction - Guidelines for
designing artificial intelligence systems**

人-系统交互工效学 人-智能系统交互设计指南

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Ergonomics Standardization (SAC/TC7). This document was drafted by: China National Institute of

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The development of systems with robotic, intelligent, and autonomous characteristics is progressing steadily. This is due to the unique human-system interaction issues inherent in these systems. Therefore, providing timely design guidelines for intelligent human-computer interaction has become necessary and urgent to help industry sectors design, deploy, and operate intelligent systems. Establish appropriate trust in the use of intelligent system products and services. To date, the paradigm for human-system interaction standards has been the paradigm for tool usage. The GB/T 18978 series of standards are applicable to interactive tools. The tools and their physical environment in which they are used. Intelligent systems are more interconnected, complex, probabilistic, uncertain, and social, and can enhance human capabilities. The ability to interact with intelligent systems is not merely about replacing manual labor. Interaction with intelligent systems can become a relationship, and the interfaces of intelligent systems are becoming more personalized. In this way, users and intelligent systems can form complex human-machine teams to work together to accomplish complex tasks. Human-System Interaction Ergonomics
Human-Intelligent System Interaction Design Guide

1 Scope

GB/T 47175-2026 is the Chinese national standard covering designing an AI system for the person who has to work with it - what the system tells the user about its confidence and its limits, how control is handed between person and machine, how an output can be questioned, and the automation bias that makes people accept a wrong answer because a machine gave it. It is written as ergonomics rather than as computer science, which is unusual and is the point. First edition, 18,000 words. It was issued on 27 February 2026 and has been in force since 1 September 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document provides guidelines for the development and design of human-computer interaction in intelligent systems. This document applies to the design, development, deployment, and monitoring of human-computer interaction in intelligent systems.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 18978.171-2024 Human-System Interaction Ergonomics Part 171: Guidelines for Accessible Software Design

GB/T 18978.210-2024 Human-System Interaction Ergonomics Part 210: Human-Centered Interactive System Design

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 agent An automated (3.5) entity that can sense and respond to its environment and take action to achieve its goals. [Source: ISO /IEC 22989.2022, 3.1.1] 3.2 < Subject> Research and development of the mechanism and application of intelligent systems (3.3).

Note. Research and development involve multiple fields, such as computer science, data science, humanities, mathematics, and natural sciences. [Source: ISO /IEC 22989.2022, 3.1.3]

3.3 Intelligent systems An engineered system that generates outputs such as content, predictions, recommendations, or decisions for a given set of human-defined goals. Note

1.This engineering system can utilize various technologies and methods related to artificial intelligence to develop models to represent data, knowledge, processes, etc., and then use them for execution. Perform the task. Note

2.Intelligent system design is carried out under different levels of automation. [Source: ISO /IEC 22989.2022, 3.1.4]

3.4 autonomy A system is a characteristic that allows it to adjust its intended scope of use or objectives without external intervention, control, or supervision. [Source: ISO /IEC 22989.2022, 3.1.5]