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GB/T 46483-2025

Information technology - General technical requirements for customer service virtual digital human

信息技术 客服型虚拟数字人通用技术要求

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Foreword

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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 Information Technology Standardization Technical Committee (SAC/TC28). This document was drafted by: Beijing SenseTime Technology Development Co., Ltd., China Electronics Technology Standardization Institute, and Shenzhen CESI Information Technology Co., Ltd. Limited Liability Company, Xiamen CESI Technology Development Co., Ltd., Beijing Institute of Technology, Beijing Jinfa Technology Co., Ltd., Beijing Yingdong Real Estate Certification Certificate Service Co., Ltd., China Mobile (Hangzhou) Information Technology Co., Ltd., Guangzhou Quwan Network Technology Co., Ltd., iFlytek Co., Ltd. Pengcheng Laboratory, Beijing Haina Data Technology Co., Ltd., Migu Culture Technology Co., Ltd., China Southern Power Grid

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1 Scope

GB/T 46483-2025 is the Chinese national standard covering the animated agent that answers customers - the speech and language capability and the handover to a person when it fails, the appearance and the synchronisation of voice and face, the disclosure that the customer is not talking to a human, and the recording and data handling. First edition, already in force. Issued on 5 October 2025, it has been in force since 5 October 2025.

This document specifies the reference framework, functional and performance requirements for customer service-oriented virtual digital human systems. This document applies to the design, development, testing, application, and maintenance of customer service-oriented virtual digital human systems.

Note. In this document, for ease of expression, "virtual digital human" is abbreviated as "digital human". This abbreviation is used only within the document and is not a standard term.

2 Normative references

The contents of the following documents, through normative references within the text,

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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 36464.1-2020 Information Technology - Intelligent Voice Interaction Systems - Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Virtual digital human Using technologies such as computer graphics, computer vision, voice interaction, and AIGC (Artificial Intelligence Generated Content), we can create images, sounds, and... After training on motion models, virtual characters are presented on multimodal output devices using real people or computer-driven methods.

3.2 Virtual digital humans designed for specific industry applications and capable of providing customer service.

3.3 A digital human presented in a two-dimensional plane.

Note. 2D virtual digital humans include different styles such as 2D lifelike and 2D cartoon. 2D lifelike digital human images are usually based on real-life images or AIGC-generated content. The images and videos of the characters are generated using artificial intelligence technology; 2D cartoon digital human figures are usually drawn based on hand-drawing or image processing software. Made from [material name].

3.4 A digital human presented in three-dimensional form.

Note. 3D virtual digital humans include different styles such as 3D hyper-realistic, 3D lifelike, and 3D cartoon. 3D virtual digital human images are typically based on 3D modeling software or... AIGC algorithm creation involves complex modeling, material mapping, and rigging operations, or it can be generated through Neural Radiance Field (NeRF).

3.5 Voice wakeup; voice trigger A voice interaction system that is in audio stream monitoring mode switches to command word recognition and connection mode after detecting specific features or events. The process continues with speech recognition and other processing states. [Source: GB/T 36464.1-2020, 3.17]

3.6 A speech processing technique for analyzing and determining the effective start and end points of speech in a continuous audio stream. [Source: GB/T 36464.1-2020, 3.22]

3.7 Speech recognition The process of converting human voice signals into text or instructions. [Source: GB/T 21023-2007, 3.1]

3.8 Understand the semantic information of data symbols, or the expression of requirements in specific business scenarios, and output correct feedback results as

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required. process. [Source: GB/T 36464.3-2018, 3.6]

3.9 Speech synthesis The process of synthesizing human language through mechanical and electronic methods. [Source: GB/T 21024-2007, 3.1]

3.10 gesture recognition The gesture is determined from the input gesture data. [Source: GB/T 38665.1-2020, 3.5]

3.11 Limb recognition The body movements are determined from the input body data.

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