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Internet of things - Crowd-sensing - Technical architecture

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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This document was drafted by: Northwestern Polytechnical University, China Electronics Technology Standardization Institute, Xi'an Aerospace Automation Co., Ltd., Shenzhen CESI Information Technology Co., Ltd., Jiangsu CESI Technology Development Co., Ltd., Xidian University, Northwest University, Tianjin Kunpeng Information Technology Co., Ltd., Wuxi Internet of Things Innovation Center Co., Ltd., China Water Information Technology (Wuhan) Co., Ltd., Chongqing Quality and Standardization Research Institute, Shenmu Information Industry Development Group Co., Ltd., Harbin Engineering University, Institute of Automation, Chinese Academy of Sciences, Beijing University of Posts and Telecommunications, Chengdu Qin Sichuan Internet of Things Technology Co., Ltd., China Mobile (Hangzhou) Information Technology Co., Ltd., Fuzhou University, Shenzhen Yunliwuli Technology Co., Ltd. company.

The main drafters of this document are: Yu Zhiwen, Lei Gen, Yang Huijia, Yang Hong, Liang Yunji, Zhang Jianqi, Su Jingru, Tao Yi, Guo Xiong, Li Qingyang, Yin Xiaoyan, Zhang Hui, Li Yinglong, Dong Jielian, Hu Chengsheng, Yu Nengchao, Liu Shengqiang, Song Hongtao, He Saike, Zhou Anfu, Shao Zehua, Wang Zhaoxu, Yu Zhiyong, Zhang Min, Li Runze, Liang Yanju, Tian Yue, Zhang Cheng, Li Bo, Han Qilong, Zhang Peijie, Zhang Huanhuan, Liang Yongzeng, Jia Jingrun, Huang Fangwan, Zhao Jun.

IoT crowd-sensing technology architecture

1 Scope

This document establishes the technical architecture of the Internet of Things crowd intelligence perception, and stipulates the construction and management of intelligent agents in the Internet of Things crowd intelligence perception technical architecture.

Management, data processing, and group intelligence collaborative reasoning requirements.

This document is applicable to the research, development and use of IoT crowd-sensing technology.

2 Normative references

GB/T 41780.1-2022

GB/T 41782.2-2022

GB/T 42564-2023

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Sensing terminal sensing terminal

A device that can collect information and/or perform operations on objects or environments and can communicate via the Internet.

[Source. GB/T 37093-2018, 3.3]

3.2 terminal device

A device with computing capabilities that can establish a communication connection directly with the service platform through an upstream interface.

[Source. GB/T 40027-2021, 3.1]

3.3 Agent

Terminal devices that can perceive the external environment, guide their own behavior decisions through learning or reasoning, and take actions to achieve specific goals. system.

Note. In the context of the Internet of Things, an intelligent agent is usually composed of two parts. a physical entity and its corresponding intelligent algorithm program.

Intelligent devices, intelligent robots or intelligent computer systems, etc.

3.4 Heterogeneous agent

A collection of intelligent agents with different parameters and performance, data or

interface heterogeneity, created using different technologies and platforms.

3.5 Sensing data

A general term for raw data acquired through data collection or data representing object information that has been processed on this basis.

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