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IEEE Standard for Digital Media Content Description

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IEEE Standard for Digital Media Content Description

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Abstract: Tools for description of visual content, including still images and videos, are specified in this standard. Visual content description consists of visual features, text labels, and device information. This standard is divided into two profiles: basic profile and surveillance profile. The basic profile specifies basic visual descriptors that apply to general purpose. The surveillance profile is a superset of the basic profile and includes all the descriptions specified in the basic profile as well as special descriptors for surveillance purpose.

Keywords: description, feature, IEEE 1857.6™, image, label, video

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Introduction

This introduction is not part of IEEE Std 1857.6-2018, IEEE Standard for Digital Media Content Description.

This standard defines the description of digital media content for image and video.

Contents

IEEE Standard for Digital Media Content Description

1. Overview

1.1 Scope

The standard for digital media content description specifies digital media visual content descriptors to satisfy the requirement of searching in large-scale multimedia data and support applications to visual surveillance.

1.2 Purpose

The standard provides compact descriptors to represent the visual features and describe the category, attribute, property, and context information of the multimedia data, which can facilitate content searching and indexing, save bandwidth for transmission, enable hardware support for descriptor extraction and matching, ensure interoperability of multimedia applications and ubiquitous platforms, simplify design of visual application, and enhance performance on visual surveillance applications, which demand high bandwidth.

2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so each referenced document is cited in text and its relationship to this document is explained). For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.

ISO/IEC 15938-3, Information technology — Multimedia content description interface — Part 3:Visual.[1]

[1] ISO/IEC documents are available from the International Organization for Standardization (https://www.iso.org/) and from the International Electrotechnical Commission (http://www.iec.ch). These documents are also available from the American National Standards Institute (http://www.ansi.org/).