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Information technology — Artificial intelligence for multimedia —

Part 3: Optimization of encoders and receiving systems for machine analysis of coded video content

Technologies de l'information — Intelligence artificielle pour le multimédia —

Partie 3: Optimisation des codeurs et des systèmes de réception pour l'analyse automatique de contenus vidéo codés

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Foreword

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Information technology — Artificial intelligence for multimedia —

Part 3: Optimization of encoders and receiving systems for machine analysis of coded video content

1 Scope

This document provides information about optimizations for encoders and receiving systems for conducting machine analysis tasks on coded video content. It provides a concept-level overview of recent practices and provides comments on technical aspects and cautions to be taken when interpreting the results. This document describes technologies that have recently been studied and have demonstrated benefits to coding efficiency for some machine analysis tasks.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitute requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Rec. ITU-T H.266 | ISO/IEC 23090-3, *Versatile video coding*

Rec. ITU-T H.265 | ISO/IEC 23008-2, *High efficiency video coding*

Rec. ITU-T H.264 | ISO/IEC 14496-10, *Advanced video coding*

Rec. ITU-T H.274 | ISO/IEC 23002-7, *Versatile supplemental enhancement information messages for coded video bitstreams*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in Rec. ITU-T H.266 | ISO/IEC 23090-3, Rec. ITU-T H.265 | ISO/IEC 23008-2, Rec. ITU-T H.264 | ISO/IEC 14496-10, Rec. ITU-T H.274 | ISO/IEC 23002-7 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
machine consumption
operation of a machine analysis task such as object detection, segmentation or object tracking

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