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Part 18: Conformance and reference software for compression of neural networks

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Foreword

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Introduction

This document describes conformance testing and the reference software for ISO/IEC 15938-17 Compression of neural networks for multimedia content description and analysis. The reference software includes both encoder and decoder functionality.

The reference software is useful in aiding users of a standard for coding neural networks to establish and test conformance and interoperability, and to educate users and demonstrate the capabilities of the standard. For these purposes, the accompanying software is provided as an aid for the study and implementation of 15938-17 compression of neural networks for multimedia content description and analysis.

The purpose of this document is to provide the following:

— A set of reference bitstreams conforming to ISO/IEC 15938-17.

— Description of procedures to test conformance of bitstreams and decoders to ISO/IEC 15938-17.

— Reference decoder software capable of decoding bitstreams that conform to ISO/IEC 15938-17 in a manner that conforms to the decoding process specified in ISO/IEC 15938-17.

— Reference encoder software capable of producing bitstreams that conform to ISO/IEC 15938-17.