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## Abstract

Multimedia has recently played an increasingly important role in various domains, including Web applications, movies, video game and medical visualization. The rapid growth of digital media data over the Internet, on the other hand, makes it easy for anyone to access, copy, edit and distribute digital contents such as electronic documents, images, sounds and videos. Motivated by this, much research work has been dedicated to develop methods for digital data copyright protection, tracing the ownership, and preventing illegal duplication or tampering. This paper introduces a methodology of robust digital watermarking based on a well-known spherical wavelet transformation, applied to 3D compressed model based on polygonal representation

using a neural network. It will be demonstrated in this work that applying a watermarking algorithm on a compressed domain of a 3D object is more effective, efficient, and robust than when applied on a normal domain.

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Computer Science

**Index Terms**

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