

DATA EMBEDDING IN AUDIO: WHERE DO WE STAND

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ABSTRACT

Data embedding algorithms embed binary streams in host multimedia signals. The embedded data can add features to the host multimedia signal or provide copyright protection. We review requirements for transparent data embedding techniques in audio signals. We describe and contrast current approaches to data embedding in audio. In particular, we emphasize the advantages and limitations of the various approaches. We also describe possible signal processing and protocol level attacks on audio watermarking algorithms. We conclude with a discussion of future research directions.