

## **ABSTRACT**

*Watermarking techniques need to be developed along with advances in technology and information. Audio watermarking has the main criteria of imperceptibility and robustness. Therefore, it is important to know the best watermarking method that is robust to various signal processing attacks accompanied by good audio quality when played to humans.*

*This research designs audio watermarking with a combination of Discrete Wavelet Transformation, Discrete Sine Transformation, and QR Decomposition methods. Compressive sampling is used to compress the watermark data so that during the embedding process, the capacity of the host signal increases. The insertion technique used is Quantization Index Modulation.*

*The audio watermarking system performed in this study produces audio quality with an average SNR of 26.96 dB, average BER 0.18, average ODG -1.13, and MOS 4.2 against all audio genres tested.*

**Keywords:** *Discrete Wavelet Transform, Discrete Sine Transform, QR Decomposition, Compressive Sampling, Audio Watermarking*