

# Shape-based image retrieval using a new descriptor based on the Radon and wavelet transforms

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**Abstract :** In this paper, the Radon transform is used to design a new descriptor called Phi-signature invariant to usual geometric transformations. Experiments show the effectiveness of the multilevel representation of the descriptor built from Phi-signature and R-signature.

**Keywords :** radon transform, Phi-signature; R-signature, Wavelet transform