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Seagull optimization-based near-duplicate image detection in large image databases

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ABSTRACT

Many of the near-duplicate (ND) image detection methods involve a greater number of interest points (IPs) and large dimensions of the feature descriptors requiring huge computations and are unsuitable for large image databases. They may fail to detect NDs if the query and images in the database contain sparse IPs due to low entropy. Besides, the k-means algorithm used for the quantization of visual words may land at a suboptimal minimum for descriptors because of their distance distribution in feature space. This article presents a new ND image detection method, which uniformly distributes the IPs over low and high entropy regions, reduces the dimension of feature descriptors 9/24/24, 4:15 PM Seagull optimization-based near-duplicate image detection in large image databases: The Imaging Science Journal: Vol 71, No 7 ... Home ► All Journals ► The Imaging Science Journal ► List of Issues ► Volume 71, Issue 7 ► Seagull optimization-based near-duplicat (Sorry For Optimizing The Visual Works, It examines proposed method is more reliable and computationally efficient than the alternatives. **Q KEYWORDS:** Near-duplicate images seagull optimization K-means clustering scale invariant features transform _ bag of visual works _ discrete wavelet transform _ visual works.

scale invariant features transform bag of visual words discrete wavelet transform visual words computationally efficient

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability statement

Data sharing does not apply to this article as no new data has been created or analysed in this study.

Additional information

Notes on contributors

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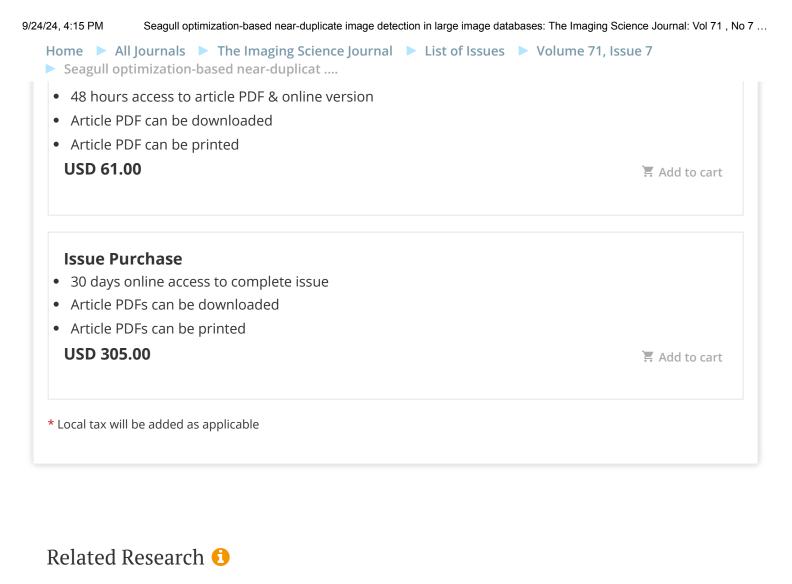
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List of Issues
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Home
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The Imaging Science Journal
List of Issues
Volume 71, Issue 7

Seagull optimization-based near-duplicat

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