

Research on SIFT features in the K-nearest neighbor search problem and application in product image search

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Abstract: This topic aims to address the challenge of quickly and accurately searching for product images using the SIFT (Scale-Invariant Feature Transform) technique. The practical context shows a high demand in the e-commerce industry for efficient search systems. The research method applies both the theory of SIFT features and empirical experiments on product image data to determine the accuracy and performance of the method. The expected results of the topic will provide a useful solution for optimizing the product search process, making an important contribution to the field of image processing and artificial intelligence.

Keywords: SIFT, image features, K-nearest neighbor search, e-commerce, image processing