**ABSTRACT**

Efficient and effective retrieval techniques of images are desired because of the explosive growth of digital images. Content-based image retrieval is a promising approach because of its automatic indexing and retrieval based on their semantic features and visual appearance. This paper discusses the method for dimensionality reduction called Maximum Margin Projection (MMP). MMP aims at maximizing the margin between positive and negative sample at each neighborhood. It is designed for discovering the local manifold structure. Therefore, MMP is likely to be more suitable for image retrieval systems, where nearest neighbor search is usually involved. The performance of these approaches is measured by a user evaluation. It is found that the MMP based technique provides more functionalities and capabilities to support the features of information seeking behavior and produces better performance in searching images.