

A Scalable Sketch Based Image Retrieval System

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Due to the progress in digital imaging technology, image retrieval (IR) has become a very active research area in computer science. Although many researches are increased in Sketch Based Image Retrieval (SBIR) field, it is still difficult to bridge the gap between image and sketch matching problem. Therefore, this paper presents a scalable SBIR system and contributes to get more efficient retrieval result. The features of both the query sketch and database images are extracted by Scale Invariant Feature Transform (SIFT) algorithm. Then the cropped keypoint images are processed by Canny edge detection. After blocking the edge image, the matched feature values are get by pixel count ratio. The retrieved images similar with query sketch are displayed by rank. Mean Average Precision (MAP) and Recall rates is measured as evaluation criteria. To evaluate the performance of this system, the benchmark sketch dataset of Eitz et al. is used.