Sketch Based Image Retrieval System based on Block Histogram Matching

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Nowadays, the usefulness of scalable image retrieval (IR) systems is obvious valiant than ever. Moreover, searching desired image by describing hand-drawn sketch is popular, because of the emerging of touch screen technology. Therefore a matching algorithm for sketch based image retrieval (SBIR) system is proposed in this paper. The features of database images and query sketch are extracted by Canny edge detection algorithm. And then block histogram matching by sliding window method is applied for matching sketch edge and edge images. The retrieved images similar with query sketch are displayed by rank order. Mean Average Precision (MAP) is measured as evaluation criteria. The benchmark sketch dataset of Eitz et al. and Flickr15K are used to evaluate the performance of this system.