**Datta, R., Joshi, D., Li, J., & Wang, J. Z. (2008). Image retrieval: Ideas, influences, and trends of the new age. *ACM Comput. Surv*, 40(2), 1-60.**

Keywords: Information retrieval, content-based image retrieval.

Datta, Joshi, Li and Wang (2008) explain that content-based image retrieval (CBIR) helps to organize digital picture archives by their visual content. They examine current trends in image retrieval, and survey and analyze current progress and future prospects of image retrieval. Additionally, trends in image retrieval using Google Scholar’s search tool and its computed citation scores were compiled in an effort to gain a better understanding of the field of image retrieval. They posit that one problem with current approaches is the reliance on visual likeness for judging semantic similarity. They postulate that this may pose a problem due to the “semantic gap” between low-level content and higher-level concepts.

The authors reason that there is a shift in the goals of the next-generation of CBIR researchers, and predict that image retrieval will be enhanced in the coming years. They postulate that further analysis has been made on the impact of image retrieval on merging

interests among different fields of study such as, computer vision, machine learning, information retrieval, human-computer interaction, database systems, Web and data mining, information theory, statistics, and psychology. They also posit that the trends indicate that while aspects such as systems, feature extraction, and relevance feedback have received a lot of attention, application-oriented aspects such as interface, visualization, scalability, and evaluation have not received due consideration.

The authors contend that the future of CBIR depends heavily on the collective focus and overall progress in each aspect of image retrieval, and how much the average individual stands to benefit from it. They argue that a long-term goal of CBIR research should include the ability to make high-resolution, high-dimension, and high-throughput images searchable by content. The authors believe that CBIR will prove beneficial for real-world applications if the requisite attention is given to the field.