



**RESEARCH ARTICLE**

## **Content Based Image Retrieval with Log Based Relevance Feedback Using Combination of Query Expansion and Query Point movement**

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***Abstract— This paper presents the Log based relevance feedback techniques, which combines two popular techniques of relevance feedback: query point movement and query expansion. From the past experiments, these two techniques are giving good results for image retrieval. But query point movement is limited by a constraint of unimodality in taking into account the user feedbacks. Query expansion gives better results than query point movement, but it cannot take into account irrelevant images from the user feedbacks. We combine the two techniques to profit from their advantages and to cope with their limitations. From a single point initial query, query expansion provides a multiple point query, which is then enhanced using query point movement. To learn the multiple point queries, the irrelevant feedback images are classified into query points which are clustered from relevant images using the query expansion technique. The experiments show that our method gives better results in comparison with the two techniques of relevance feedback taken individually.***

***Key Terms: - Relevance feedback; Query expansion; Query point movement; Log-based relevance feedback***

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Full Text: <http://www.ijcsmc.com/docs/papers/May2013/V2I5201358.pdf>