



Faculty of  
Science and  
Technology  
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# Content-based Multimedia Information Retrieval Systems

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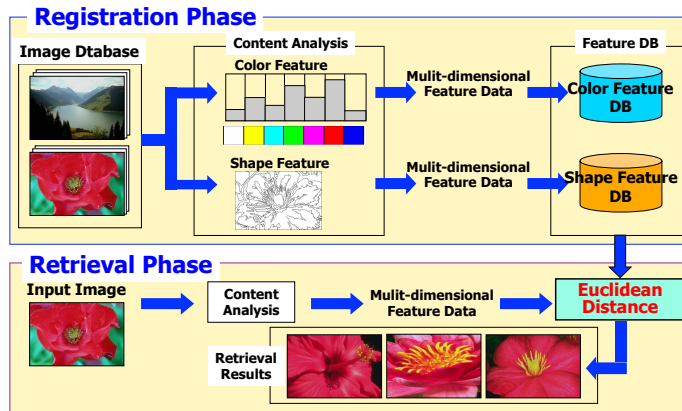


Fig.1 An example of content-based image retrieval systems

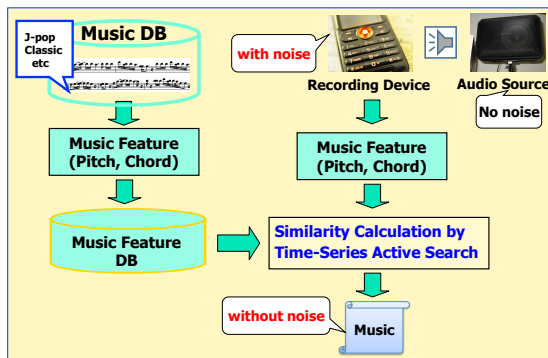


Fig.2 Noise robust music retrieval system

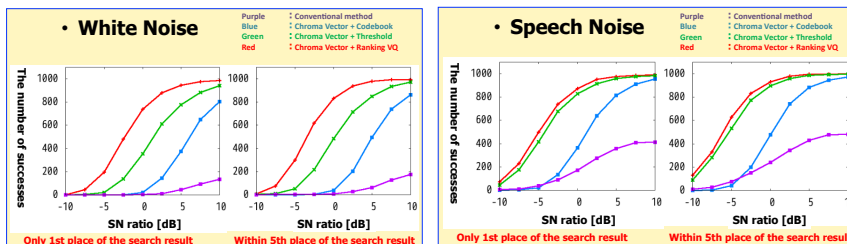


Fig.3 Experimental results on music retrieval systems

Content:

Multimedia Information Retrieval (MMIR) is one of active research fields of the computer science. An example of Content-based Image Retrieval systems (CBIR) is shown in Fig.1. CBIR can be organized in two important modules: Content analysis module extracts semantic features from images and affects the search accuracy. Feature indexing module classifies the similar features into the same category and affects the retrieval speed. Our research group developed the fast search engine as the feature indexing module.

As for video data, our group has participated the TREC Video Retrieval Evaluation (TRECVID) since 2005. Some content-based video retrieval systems were developed for the Instance Search task of the TRECVID.

As for music data, conventional systems use text data as the query, such as song titles, singer names, and so on. Our systems can search the similar music to humming and noisy data. On the noise robust music retrieval system (Fig.2, Fig.3), the user inputs the part of music data with white and speech noise, and then this system can search the similar music without the noise.

Keywords : search engine, intelligent systems

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