In this era of digital photography and internet, facial image search engines have become a very useful tool for searching through large collections of images. Currently used search engines for facial recognition rely on text annotations associated with the image. However, this method often produces misleading results due to wrong image tags or no tags at all. This technology is a face search engine that automatically labels images based on facial features and delivers results based on actual image content. The method uses simple language queries to match facial feature labels to produce fast and quality search results.

Fully automated and easily scalable image search engine for fast on-line search performances

The technology uses facial features rather than image tags to generate more accurate face search results. The method employs an extensive database of facial images that have been labeled off-line based on different facial attributes such as gender, ethnicity, expression, etc. It takes text based input about facial features to return images matching the input criteria from the database instantaneously. The results returned also contain links pointing back to the original source images and associated webpage. The engine works for recognizing frontal images, but is being expanded to work for additional portrait angles such as side view.

The algorithm has been demonstrated to produce more accurate facial search results than conventional image search engines that rely on image annotations.

Lead Inventor:

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Applications:

- Suspect search tool for law enforcement agencies
- Surveillance image searching
- Social networks
- Personal photo management

Advantages:

- Allows searching of images which haven’t been tagged with text based descriptors
- Does not produce irrelevant results from incomplete or misleading tags
- Faster online search results due to off-line image tagging
- Database can be scaled according to need

Patent information:

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Related Publications:


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