Abstract

Face recognition has an important application in criminal investigation. Previous research on sketch recognition focused on matching sketches drawn by professional artists. There has been number of representation methods are used to solve the problem of matching facial sketches to photographs.

In the proposed system composite sketches are synthesized using one of the several facial composite software systems. A component-based representation (CBR) approach is used to measure the similarity between a composite sketch and mugshot photograph. First detect the facial landmarks in composite sketches and face photos using an active shape model (ASM) followed by computing length between elements. Features are then extracted for each facial component using multiscale local binary patterns (MLBPs), and per component similarity are calculated. In proposed system per component features are measured and compared with the features of the mugshot gallery set for matching. Depending on the component matching images will be display in sorted order.
Matching Composite Sketches to Facial Photos using Component-based Approach

References


Index Terms

Computer Science Image Processing

Keywords

Component-based, Composite-sketch, Forensic sketch, Heterogeneous, Modality gap.