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.
References


Index Terms

Computer Science  Image Processing

Keywords

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