

AN IMAGE SYNTHESIS METHOD

Abstract

With the ubiquity of new information technology and media, face and facial
5 expression recognition technologies have been receiving significant attention. For
face recognition systems, detecting the locations in two-dimension (2D) images
where faces are present is a first step to be performed. However, face detection from
a 2D image is a challenging task because of variability in imaging conditions, image
orientation, pose, presence/absence of facial artefacts facial expression and occlusion.
10 Existing efforts to address the shortcomings of existing face recognition systems
involve technologies for creation of three-dimensional (3D) models of a human
subject's face based on a digital photograph of the human subject. However, such
technologies are computationally intensive nature and susceptible to errors and
hence might not be suitable for deployment. An embodiment of the invention
15 describes a method for synthesizing a plurality of 2D face images of an image object
based on a synthesized 3D head object of the image object.

FIG. 6