

A Review Paper on Face Recognition Techniques

Abstract

The study of computer vision and pattern recognition is growing because of the various commercial and practical applications of these disciplines. Identification of individuals in a multitude, access control, forensics, and human-computer interactions are only among the topics studied by these areas. However, analyzing unconstrained face recognition poses ethical issues and privacy concerns. Many recent proposals employ Holistic Methods, Geometric Approach and Local-Texture Approach, methods and databases like ORL, FERET and AR Dataset to study constrained face recognition. At least some understanding of 2D perspective was achieved. This occurred in highly controlled environments where parameters such as camera angles, lighting and distance were strictly regulated. However, significant degradation in recognition performance occurred if the environment changed or the subject smiled or frowned. This critique discusses the technology utilized in face recognition, as well as the databases of methods that utilize this technology. To help guide future research, this article discusses current knowledge and suggests future directions for study in the field of facial recognition.

Keywords

Component; Face Recognition; FERET; Holistic Methods; ORL