Abstract

Gait is the walking style of a person. The gait recognition method uses the concept of extracting the features from the video sequence. These features can be used in surveillance systems to identify the individual. In this paper, gait recognition using Multi objective Bat algorithm is proposed in which the shape descriptor features are included to improve the accuracy of gait recognition. Gait recognition of individuals is done by considering the shape features along with the best informative less effective part and most effective parts which are extracted from silhouettes by considering the effect of various cofactors. The shape of the movable parts of human body varies with motion and hence only the most informative movable parts with fixed movement are considered. The shape features can be extracted by angular radial transform and FFT is used for converting them from frequency domain. The results are evaluated using Multi objective PSO and Multiobjective Bat algorithm and it is observed that the proposed gait recognition using Bat algorithm achieves better results when compared to that of the PSO method.
References


18. OnlineCASIADatabasehttp://www.cbsr.ia.ac.cn/english/Gait%20Databases.asp

Index Terms

Computer Science Algorithms

Keywords

Gait recognition, Multi-objective PSO, BAT algorithm, Shape feature.