Handprint Identification Using Fuzzy Inference

In this paper, a personal identification system based on handprintfeatures is presented. This system utilizes a CCD(Couple ChargedDevice) digital camera to capture a handprint image. Three differentfeatures are extracted from the image, which are WLIP(Wide IntegratedProfile), VWILP(Variation of WLIP), and FW(Finger Width). Thesimilarity for each of the first two features and the dissimilarityfor the third feature between two handprint images are measured usingcorrelation functions and the Euclidean distance, respectively.Finally, the identification is accomplished by a fuzzy inferenceengine based on these similarity/dissimilarity measures. Theexperimental results indicate that the proposed method hasdemonstrated good performance in both identification rate and speed.