ABSTRACT

Security is the main problem that need our attention on technologies world at least. Old base security still have more weakness. Palmprint was one of interest research in biometric, as compared other research. Palmprint has advantage likes stable feature and low cost. In this research present how to identification palmprint using haar wavelet transform for extraction feature and support vector machine (SVM) for classification.

Preprocessing data beforehand then doing extraction feature. Then classified using SVM where output data extraction feature separate into feature space high dimension. Then classified into classes. Classification method not just SVM, but there are neural network. SVM choosed because rarely does overfitting.

Video was data that using in this research, because can implementation in realtime condition. 30 palmprint video was captured using digital camera. Testing system do with feature length and parameter kernel function on SVM. After testing, can getting best accuracy 86% for ideal data and accuracy 81% for realtime data condition.

Keyword: security, haarwavelet, support vector machine, palmprint, biometric, video