Radon transform for face recognition

Abstract

Face recognition is an important biometric because of its potential applications in many fields such as access control, surveillance, and human-computer interactions. In this article, an investigation of the effect of the step size for both the angle and the vector of the Radon transform on the performance of a face recognition system based on principal component analysis (PCA) and Euclidean distance is carried out. It was found that changing the vector or the angle step size affects the performance of the system. However, the best equal error rate is achieved when the step size for both angle and vector is set to 1.