

Hand Motion Trajectory Analysis for Dynamic Hand Gestures Used in Indian Sign Language

Authors : Daleesha M. Viswanathan, Sumam Mary Idicula

Abstract : Dynamic hand gestures are an intrinsic component in sign language communication. Extracting spatial temporal features of the hand gesture trajectory plays an important role in a dynamic gesture recognition system. Finding a discrete feature descriptor for the motion trajectory based on the orientation feature is the main concern of this paper. Kalman filter algorithm and Hidden Markov Models (HMM) models are incorporated with this recognition system for hand trajectory tracking and for spatial temporal classification, respectively.

Keywords : orientation features, discrete feature vector, HMM., Indian sign language

Conference Title : ICIPCVPR 2015 : International Conference on Image Processing, Computer Vision, and Pattern Recognition

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : August 24-25, 2015