

Abstract

Application of multimedia systems in presenting lectures for different purposes is now an ordinary work.

Many lectures are now given by the use of computers, video projectors, and appropriate soft wares. Often it becomes necessary that the lecturers writes or draws something during his speech. At the moment, doing this is somehow expensive or cumbersome. This paper introduces a novel idea by which the lecturer can write over the curtain or board using the laser pointer in his hand while he is speaking. The approach is quiet efficient, cost effective and is an innovative application of video mining, a subfield of data mining.

Also we added digit recognition to the system, which is robust to the scaling and translating of digits. At first by tracking the light of laser pointer, a virtual image is made and on-line features extracted. Then by additional off-line features, combined with on-line ones and a multilayer neural network, unknown digit is recognized.

Keywords

Video mining, On-line feature, Off-line feature, multilayer neural network.

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