

Group No: E3

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TEAM MEMBERS:

Gopi Thulasinathan T	- CB.EN.U4CSE11414
Sravanthi N	- CB.EN.U4CSE11428
Narasimha Prasath K	- CB.EN.U4CSE11429
Rahul E	- CB.EN.U4CSE11439
Varun Kumar A	- CB.EN.U4CSE11458

PROJECT GUIDE:

Ms. Padmavathi S.

Title: Activity Recognition using gestures

Problem Statement:

To develop Articulated human body model by using the limbs and joints, and to track the human motion in a video sequence.

Abstract:

We propose a method to find candidate 2D articulated model configurations by searching for locally optimal configurations under a weak but computationally manageable fitness function. This is accomplished by first parameterizing a tree structure by its joints. Candidate configurations can then efficiently and exhaustively be assembled in a bottom-up manner. Working from the leaves of the tree to its root, we maintain a list of locally optimal, yet sufficiently distinct candidate configurations for the body pose. We then adapt this algorithm for use on a sequence of images by considering configurations that are either near their position in the previous frame or overlap areas of interest in subsequent frames. This way, the number of partial configurations generated and evaluated significantly reduces while both smooth and abrupt motions can be accommodated. This approach will be validated on test and standard datasets.