

HUMAN BEHAVIOUR  
RECOGNITION,  
IDENTIFICATION,  
AND COMPUTER  
INTERACTION

Edited by

**Othman Omran Khalifa**, B.Sc., M.Sc., Ph.D.,  
International Islamic University Malaysia

**Shihab A. Hameed**, B.Sc., M.Sc., Ph.D.,  
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**Sheroz Khan**, B.Sc., M.Sc., Ph.D.,  
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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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## Chapter 7

### Human Posture Recognition Results using Database A

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#### 7.1. Introduction

Human Posture Recognition gives machines the ability to detect, track and identify people and their actions from video, has become a central topic in computer vision research. Recognition of human posture is a very challenging problem. The training and evaluation stage, datasets of pre-processed posture images are needed. After the video sequences have been prepared, for the training and evaluation stage, they are pre-processed to produce three different types of datasets. This chapter will explain the results obtained using Dataset A. This dataset was obtained after pre-processing some of the video sequences that were taken at MIMOS building. In this dataset, there are six types of postures considered. The “*unknown*” posture was added so that during the training stage, the system could learn to differentiate postures which cannot be classified as belonging to any of the other types. This dataset is the main dataset for evaluating and comparing the performance (in terms of accuracy, i.e. recognition rate) of the different classifiers. The details of Dataset A are shown in Table 7.1.

Table 7. 1: Details of Dataset A

Postures	No. of training Samples	No. of testing samples	Total no. of samples	% of no. of testing samples out of total no. of samples
Climbing	300	80	380	21.05%
Fighting	300	80	380	21.05%
Jumping	300	80	380	21.05%
Lying	300	80	380	21.05%
Pointing	300	80	380	21.05%