

HUMAN BEHAVIOUR
RECOGNITION,
IDENTIFICATION,
AND COMPUTER
INTERACTION

Edited by

Othman Omran Khalifa, B.Sc., M.Sc., Ph.D.,
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Chapter 5

Human Posture Recognition: Methodology and Implementation

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5.1 Introduction

Human Posture Recognition is a key component of many application-oriented computer vision systems, for instance in automated visual surveillance, automotive safety, computer interaction and multimedia processing. Human tracking is an important part of an automated video surveillance system. It is used to track any previously detected human for the mapping or prediction purpose or simply for behavioural analysis. High detection rate and low false alarm rates are essential for achieving robustness in higher level vision tasks such as tracking or activity recognition.

5.2 System Description

The system implementation consists of two *stages* which are:

1. Training and evaluation stage.
2. Deployment stage.

5.2.1 Training and Evaluation

In the training and evaluation stage as shown in Figure 5.1, all the parameters of the system must be incrementally improved to optimal values so that the model would be ready for deployment.