

HUMAN BEHAVIOUR
RECOGNITION,
IDENTIFICATION,
AND COMPUTER
INTERACTION

Edited by

Othman Omran Khalifa, B.Sc., M.Sc., Ph.D.,
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Chapter 6

Human Posture Recognition Database and Preprocessing

Simulation Results

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6.1. Introduction

For training and evaluation stage, datasets of pre-processed posture images are needed. In order to obtain them, video sequences have to be recorded and preprocessed. The format of video files produced by the video camera is *QuickTime Video File* with the extension of “.MOV”. However, the problem is that the *QuickTime Video File* is not supported by any of the MATLAB video input/output (I/O) functions.

There are two main video I/O functions provided by MATLAB. The first one is “*aviread*” function which only supports AVI file format with the following types of video compression *codecs*: (1). Indeo3, (2). Indeo5, (3). Cinepak, (4). MSVC, (5). RLE and (6). None (uncompressed video). The second video I/O function “*mmreader*”, which is slightly more advanced, supports the file formats as shown in Figure 6.1.

Platform	Supported File Formats
Windows [®]	<ul style="list-style-type: none"> • AVI (and) • MP4 (H.264) • Windows Media Video (Vista, XP, 2000) • and any format supported by <i>Movie</i> (see “<i>movie</i>” help)
Macintosh [®]	<ul style="list-style-type: none"> • AVI (and) • MP4 (H.264) • MPEG-4 (Apple, iS400) • Apple QuickTime (Movie (.mov)) • and any format supported by QuickTime as listed at http://www.apple.com/quicktime/techspecs.html

Figure 6.1. : File formats supported by MATLAB “*mmreader*” function