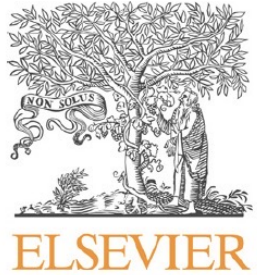




# LITERATURE EVALUATION

MOHAMMAD ATIEH





Contents lists available at ScienceDirect

# Pattern Recognition

journal homepage: [www.elsevier.com/locate/pr](http://www.elsevier.com/locate/pr)



## Human detection from images and videos: A survey



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### ARTICLE INFO

#### Article history:

Received 10 January 2015

Received in revised form  
14 July 2015

Accepted 30 August 2015

Available online 13 September 2015

#### Keywords:

Human detection  
Human description  
Object detection  
Object description

### ABSTRACT

The problem of human detection is to automatically locate people in an image or video sequence and has been actively researched in the past decade. This paper aims to provide a comprehensive survey on the recent development and challenges of human detection. Different from previous surveys, this survey is organised in the thread of human object descriptors. This approach has advantages in providing a thorough analysis of the state-of-the-art human detection methods and a guide to the selection of appropriate methods in practical applications. In addition, challenges such as occlusion and real-time human detection are analysed. The commonly used evaluation of human detection methods such as the datasets, tools, and performance measures are presented and future research directions are highlighted.

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- **Purpose**

The purpose is to review the latest techniques and challenges of human detection.

- **Is the research methodology appropriate for the stated purpose or question?**

Qualitative literature review/survey was utilized.

I think it was appropriate since many different techniques and algorithms in different situations were reviewed. So, it was not possible to perform a quantitative synthesis.

- **Is the data collection and analysis appropriate for the stated purpose or question?**

The article search methodology was not shown.

- **Does each paper support its claims and conclusions with explicit arguments or evidence?**

-To a certain degree, yes.

- **How would you enhance the work/paper?**

By doing a systematic review instead:

-Standardized article search.

-Evaluation of the quality of the studies.

# Occlusion Handling and Human Detection Based on Histogram of Oriented Gradients for Automatic Video Surveillance

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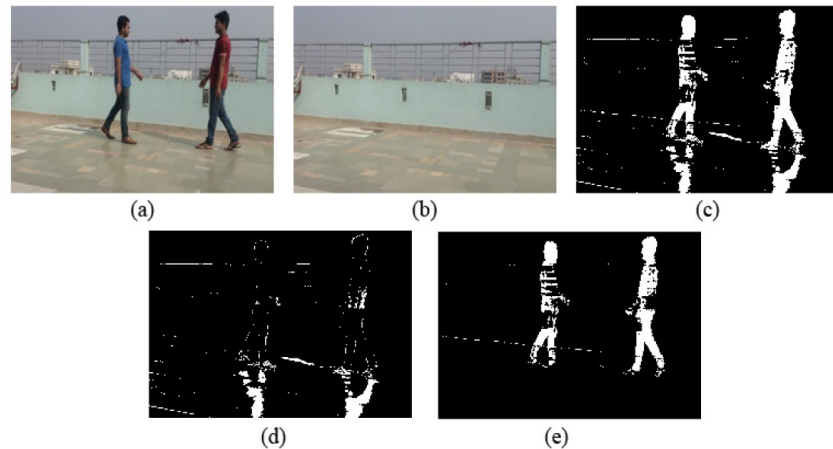


Fig. 2. Processing example of shadow elimination process: (a) current frame, (b) background frame, (c) foreground with shadow image, (d) shadow region and (e) foreground without shadow image.

## •Purpose

Testing a framework to detect occluded humans by a special background extraction method that includes shadow elimination.

### •Is the research methodology appropriate for the stated purpose or question?

Yes. The research methodology was quantitative (Experiment).

### •Is the data collection and analysis appropriate for the stated purpose or question?

Yes. They trained the framework on 140 frames and tested it on 1280 frames (indoor and outdoor; variable appearances, poses, and uneven illumination; and with occlusion).

### •Does each paper support its claims and conclusions with explicit arguments or evidence?

Yes. Their framework had 93.1% precision and 91.8% accuracy. But they compared their framework to only one published framework.

### •How would you enhance the work/paper?

1- Comparing more than one framework under the same testing conditions.

2- Including more example images of the tested frames in the article.