

# 應用影像處理與CCD攝影機於影像監控之研究

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## 摘要

This paper presents an experiment of an Image Tracking System using the image processing techniques on a PC platform. Images are processed by Image differencing to separate the object from the background. The object' s moving distance is then calculated based on the object' s geometry center obtained from the boarder of the separated image. In addition, the step motor is used to control the CCD camera as a feedback of the changing positions. The CCD camera is thus able to track and monitor a moving object in real-time.

This experiment is divided into three processes: The first process is to separate the object from the background using the image processing technique. The second process is to integrate a motor with the CCD camera to control the camera' s movement. The third process is to track the object using the image transformed from the camera.

關鍵字：Image processing , Image tracking  
, Image differencing