夜間營業告示牌之偵測與辨識

吳祥瑞、曾逸鴻

E-mail: 389427@mail.dyu.edu.tw

摘 要

在營業告示牌偵測與辨識的研究中，大多數都只探討日間場景，故夜間告示牌之偵測與辨識仍有許多探討空間；因此，本研究提出有效的夜間營業告示牌之偵測與辨識方法，提升偵測與辨識夜間告示牌的準確率。首先，使用者可以依需求在場景畫面中設定關注區域(Region of Interest)，本系統在關注區域內，找出可能為營業告示牌的相對明亮區域，然後擷取明亮區域像素之RGB顏色分布，分離出不同底色營業告示牌的區塊，接著將營業告示牌區域影像做清晰化處理，再透過二值化與相連元件(Connected Component)偵測方法找出場景文字的所在區域，將文字擷取出來後，針對使用者欲檢索的關鍵字並搭配同義詞庫來做文字辨識與特定招牌文字判定。本研究所提的方法，經實驗分析證實可提升夜間營業告示牌偵測與辨識的準確率。

關鍵詞 : 夜間影像、營業告示牌、影像辨識、同義詞

目錄

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