

部分遮蔽人臉之偵測與辨識

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摘要

隨著科技日益進步，目前人臉辨識技術所識別的範圍大都是以整個臉部為主，不過人臉會因為不同的情形而會出現不同的遮蔽狀況，例如感冒戴口罩及太陽刺眼所以戴太陽眼睛，在這樣的情況下要進行的人臉偵測與辨識，所造成的誤判機率很大。因此，為了使人臉辨識系統，能夠更精確地偵測並辨識出人臉，本研究針對人臉的遮蔽狀況，進行偵測與辨識。遮蔽的部分是為了模擬不同部位的遮蔽範圍，因此，我們在系統建置時，先建立人臉遮蔽子集模型，以便之後影像比對，在人臉偵測階段將所輸入的影像進行膚色偵測、影像正規化及分析膚色分佈，判斷人臉區域與影像遮蔽範圍，再利用人臉的特徵進行特徵的擷取，最後再將擷取的資訊與人臉遮蔽子集模型比對，以得到辨識的結果。本研究建置出一套部分遮蔽的人臉識別系統，實驗結果顯示辨識率能達到八成。

關鍵詞：人臉偵測、人臉辨識、部分遮蔽人臉

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