

人臉偵測與性別辨識之研究

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摘要

在本篇論文中，我們提出一個基於彩色與幾何特徵之系統，同時實現人臉偵測與性別辨識技術。本論文之人臉偵測法則是由人臉候選區域選取和人臉區域驗證兩個部份所構成。首先，我們利用膚色特徵粗略選取出人臉候選區域。此外，我們亦偵測人眼與其幾何特徵，篩選出可能之人眼配對。因此透過人臉候選區域和人眼配對之結合，可以達到人臉偵測之目標。至於性別辨識，我們從人臉偵測結果擷取有用特徵，這些特徵包含臉部與嘴唇資訊，基於擷取特徵與訓練分類器，我們可以辨識測試影像之性別資訊。實驗結果顯示出我們所提出之系統不僅實現人臉偵測並完成性別辨識技術。

關鍵詞：人臉偵測、人眼配對檢測、膚色偵測、性別辨識

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