

Title: Age and Gender Classification using Multiple Convolutional Neural Network

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Abstract: Since the advent of social media, there has been an increased interest in automatic age and gender classification through facial images. So, the process of age and gender classification is a crucial stage for many applications such as face verification, aging analysis, ad targeting and targeting of interest groups. Yet most age and gender classification systems still have some problems in real-world applications. This work involves an approach to age and gender classification using multiple convolutional neural networks (CNN). The proposed method has 5 phases as follows: face detection, remove background, face alignment, multiple CNN and voting systems. The multiple CNN model consists of three different CNN in structure and depth; the goal of this difference It is to extract various features for each network. Each network is trained separately on the AGFW dataset, and then we use the Voting system to combine predictions to get the result.

Keywords: Age and gender classification Facial image analysis Convolutional neural networks (CNN) Ensemble learning Voting-based classification

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