ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES (AUTONOMOUS)

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2019-2023



Abstract on

AGE AND GENDER DETECTION USING DEEP LEARNING

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AGE AND GENDER DETECTION USING DEEP LEARNING

ABSTRACT

Automatic prediction of age and gender from face images has drawn a lot of attention recently, due it is wide applications in various facial analysis problems. However, due to the large intra-class variation of face images, the existing models are still behind the desired accuracy level, which is necessary for the use of these models in real-world applications. Using attention mechanism enables our model to focus on the important and informative parts of the face, which can help it to make a more accurate prediction. We train our model in a multi-task learning fashion, and augment the feature embedding of the age classifier, with the predicted gender, and show that doing so can further increase the accuracy of age prediction. Our model is trained on a popular face age and gender dataset, and achieved promising results. In this project, we are going to use Deep Learning framework, based on the ensemble of attentional and residual convolutional networks, to accurately identify the gender and age of a person from the image of a face. The predicted gender may be one of 'Male' and 'female' and the predicted age is in the range of (0-2), (4-6), (8-12), (15-20), (25-32), (38-43), (48-53), (60-100). Here we will use the Adience dataset.

KEYWORDS:

age classifier, predicted gender, age and gender dataset, attentional and residual convolutional networks, Adience dataset, facial analysis.