



**Ministry of Higher Education and
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University of Babylon
College of Information Technology
Department of Information Security
Study: (Morning)**



Facial Age Estimation Using Convolutional Neural Networks for privacy preserving

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Abstract

Face images contain many important biological characteristics, and facial expression recognition. Taking face age estimation as an example, the estimation of face age images through algorithms can be widely used in the fields of biometrics, intelligent monitoring, human-computer interaction, and personalized services. With the rapid development of computer technology, the processing speed of electronic devices has greatly increased, and the storage capacity has been greatly increased, allowing deep learning to dominate the field of artificial intelligence.

Convolutional neural networks (CNN) in deep learning have incomparable advantages in processing image features. Practice has proven that the accuracy of using convolutional neural networks to estimate the age of face images is far superior to traditional methods. However, as neural networks are designed to be deeper, and networks are becoming larger and more complex

Where the FG-NET data set was used, the accuracy of the project was obtained along with the life expectancy of a person.