

Project Phase-1 (19CS703) Report  
on

# **EMOTION RECOGNITION BY INCLUSION OF AGE AND GENDER PARAMETER BY DEEP LEARNING**

*Submitted to*

**NMAM INSTITUTE OF TECHNOLOGY, NITTE**  
(An Autonomous Institution under VTU, Belagavi)

*In partial fulfillment of the requirements for the award of the*

Degree of Bachelor of Engineering  
in  
Computer Science and Engineering

*by*

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# CERTIFICATE

*Certified that the project work entitled “Emotion Recognition By Inclusion Of Age And Gender Parameter By Deep Learning” is a bonafide work carried out by Adithya Holla K(4NM19CS007), Aditya Murugan (4NM19CS010), Akil Raif (4NM19CS014), Ashwamedh Arote (4NM19CS031) in partial fulfillment for the award of Degree of Bachelor of Engineering in Computer Science and Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project Phase- 1 (19CS703) prescribed for the said Degree.*

**Name & Signature of Guide**

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**Signature of HOD**

**Signature of the Principal**

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**Name of the Examiners**

**Signature with Date**

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2. \_\_\_\_\_

## ACKNOWLEDGEMENT

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# ABSTRACT

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Automatic gender, age and emotion recognition have relevant to an extension of its usage in various software and hardware, particularly because of the growth of online social networking websites and social media. The advertisements can be specialized based on the age and the gender of the person on the phone. It also can help identify suspects in criminal cases or at least it can minimize the number of suspects. A Convolution Neural Network is a deep neural network (DNN) widely used for the purposes of image recognition and processing and NLP. A convolution neural network architecture is built and the model is trained for gender, age and emotion recognition from images. An android application can be developed implementing the age, gender and emotion recognition. With the phone capturing photos and the frames are pre-processed and fed to the model to accomplish this task. The prediction is displayed accordingly.