

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 4, May 2022

Automatic Mood and Gloom Detection using Visual Inputs

Aniket Gholve¹, Raja Kumar², Ritik Raj³, Om Sharma⁴ Students, Department of Computer Engineering^{1,2,3,4} Sinhgad College of Engineering, Pune, Maharashtra, India

Abstract: In natural psychological equilibrium, tension may be generally perceived as disturbance. If a user is unable to reconcile the expectations imposed on him/ her with user capacity to deal to them, so it generates tension and produces burden on mental health. Gloom may be generally described as psychological equilibrium disruption. One of major research fields of biomedical engineering is Gloom detection, as proper Gloom prevention could be easy. Facial expression recognition is the process of identifying human emotion. This is both something that humans do automatically but computational methodologies have also been developed. Several bio signals are available. Which are useful in identifying levels of Mood and Gloom since these signals indicate distinctive changes in the induction of Mood and Gloom. In this project, because of the easily accessible datasets on Kaggle, image processing is used as the primary candidate and the CNN model types have been formed which is used to predict the mood and gloom of persons.

Keywords: CNN, Psychological Equilibrium, Image Processing, Kaggle

REFERENCES

- [1]. Nur Alia Syahirah Badrulhisham and Nur Nabilah Abu Mangshor, "Emotion Recognition Using Convolutional Neural Network (CNN)". The 1st International Conference on Engineering and Technology (ICoEngTech), doi:10.1088/1742-6596/1962/1/012040, Journal of Physics: Conference Series 2021.
- [2]. D Y Liliana, "Emotion recognition from facial expression using deep convolutional neural network" 2018 International Conference of Computer and Informatics Engineering (IC2IE). doi:10.1088/1742-6596/1193/1/012004, IOP Conf. Series: Journal of Physics: Conf. Series 1193 (2019) 012004 I
- [3]. Rahul Chauhan, Kamal Kumar Ghanshala and R.C Joshi, "Convolutional Neural Network (CNN) for Image Detection and Recognition" First International Conference on Secure Cyber Computing and Communication (ICSCCC) 2018
- [4]. Akash Saravanan, Gurudutt Perichetla, Dr. K.S.Gayathri, "Facial Emotion Recognition using Convolutional Neural Networks" doi : arXiv:1910.05602v1 [cs.CV] 12 Oct 2019
- [5]. Lang Hea, Cui Caob, "Automated depression analysis using convolutional neural networks from speech," Journal of Biomedical Informatics Volume 83, Pages 103-111, July 2018.
- [6]. Ninad Mehendale "Facial emotion recognition using convolutional neural networks (FERC)". Received: 16 July 2019 / Accepted: 12 February 2020 / Published online: 18February 2020 © Springer Nature Switzerland AG 2020.
- [7]. Erhan Tiryaki Akshay Sonawane, Lakshman Tamil. "Real-Time CNN Based ST Depression Episode Detection Using Single-Lead ECG". 021 22nd International Symposium on Quality Electronic Design (ISQED) | 978-1-7281-7641-3/20/\$31.00 ©2021 IEEE | DOI: 10.1109/ISQED51717.2021.9424275
- [8]. M. Pushpa Valli, "Image Processing Technique for Fruit Grading", International Journal of Engineering and Advanced Technology (IJEAT) 2019.
- [9]. Milan Tripathi. "Facial Emotion Recognition Using Convolutional Neural Network" Issn: 0976-9102 (Online) Ictact Journal On Image And Video Processing, Volume: 12, ISSUE: 01 DOI: 10.21917/ijivp.2021.0359, AUGUST 2021.
- [10]. Arselan Ashraf, Teddy Surya Gunawan, Bob Subhan Riza, Edy Victor Haryanto, Zuriati Janin "On the review of image and video-based depression detection using machine learning." Indonesian Journal of Electrical Engineering

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 4, May 2022

and Computer Science Vol. 19, No. 3, pp. 1677~1684 ISSN: 2502-4752, DOI: 10.11591/ijeecs. v19.i3. pp1677-1684, September 2020.