

Emotion Recognition using Artificial Intelligence

Anshul Kumar¹, Anuj Tiwari², Hemant Kumar Yadav³, Piyush Saini⁴, Manik Chandra Pandey⁵

Students, Department of Computer Science and Engineering^{1,2,3,4}

Assistant Professor, Department of Computer Science & Engineering⁵

ITS Engineering College, Greater Noida, India

Abstract: This Paper is intended to explore research done on identifying research done on the identifying the face recognition of users and play music according to the mood of the users by using AI and ML.

Keywords: Face Recognition, Formatting, Image Processing, Computer Vision, Mood Detection, Emotion Detection

REFERENCES

- [1]. Crowley, J. L. and Coutaz, J., "Vision for Man Machine Interaction," Robotics and Autonomous Systems, Vol. 19, pp. 347-358 (1997).
- [2]. Habibzad, Ninavin, Mir Kamal Mirnia, "A new algorithm to classify face emotions through eye and lip feature by using particle swarm optimization."
- [3]. Cah, D. and Ngan, K. N., "Face Segmentation Using Skin-Color Map in Videophone Applications," IEEE Transaction on Circuit and Systems for Video Technology, Vol. 9, pp. 551-564 (1999).
- [4]. Chang, C. Hu, R. Feris, and M. Turk, "Manifold based analysis of facial expression," Image Vision Comput, IEEE Trans. Pattern Anal. Mach. Intell. vol. 24, pp. 05-614, June 2006.
- [5]. "Generating Music Playlist Based on Facial Expression" US 8094891 B2 Jan 10, 2012.
- [6]. Facial feature detection using Haar classifiers, Phillip Ian Wilson, Dr. John Fernandez.
- [7]. Jia-Jun Wong, Siu-Yeung Cho, "Facial emotion recognition by adaptive processing of tree structures".
- [8]. Ekman P, "An argument for basic emotions", UK: Lawrence Erlbaum Associates Ltd. publishers, pp-169-200, 1992.
- [9]. Ekman P, "Emotions Revealed: Recognizing faces and feelings to improve communication and emotional life, New York: Times Books, pp-171-173, 2003.
- [10]. Teigen KH, Keren G, "When are successes more surprising than failures?" Cogn Emot; vol.16, pp-245-268. 2002
- [11]. Vivek JD, Gokilavani A, Kavitha S, Lakshmanan S and Karthik S 2017 A novel emotion recognition based mind and soul-relaxing system In 2017 International Conference on Innovations in Information, Embedded and Communication Systems 1-5 IEEE
- [12]. Jyoti Rani and Kanwal Garg 2014 Emotion Detection Using Facial Expressions A Review International Journal of Advanced Research in Computer Science and Software Engineering .
- [13]. Joshi A and Kaur R 2013 A Study of speech emotion recognition methods Int. J. Comput. Sci. Mob. Comput. 2 28-31
- [14]. Shoaib M, Hussain I, Mirza HT and Tayyab M 2017 The role of information and innovative technology for rehabilitation of children with autism a systematic literature review In 2017 17th International Conference on Computational Science and Its Applications 1-10 IEEE.
- [15]. P. N. Belhumeur, J. P. Hespanha, and D. J. Kriegman, "Eigenfaces vs. Fisherfaces: recognition using class specific linear projection," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 19, no. 7, pp. 711-720, Jul. 1997
- [16]. Renuka R. Londhe, Dr. Vrushshen P. Pawar, "Analysis of Facial Expression and Recognition Based On Statistical Approach", International Journal of Soft Computing and Engineering (IJSCE) Volume-2, May 2012.

- [17]. J. Yang, D. Zhang, A. F. Frangi, and J. Y. Yang, "Two-dimensional PCA: A new approach to appearance-based face representation and recognition," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 26, no. 1, pp. 131–137, 2004.
- [18]. L. Torres, J. Reutter, and L. Lorente, "The importance of the color information in face recognition," in Proceedings IEEE International Conference on Image Processing, vol. 3, pp. 627–631, 1999.
- [19]. Thayer "The biopsychology of mood & arousal", Oxford University Press, 1989.
- [20]. Z. Zeng, M. Pantic, G. I. Roisman, and T. S. Huang, "A survey of affect recognition methods: Audio, visual, and spontaneous expressions," IEEE. Transaction Pattern Analysis, vol 31, January 2009.