

S.No	Model	Dataset Used	Test Accuracy
1	Mini-ResEmoteNet [1]	FER2013	70.20%
2	Segmentation VGG-19 [2]	FER2013	75.97%
3	IL-CNN [3]	MMI	70.67%
4	VGGNet [4]	FER2013	73.28 %
5	Norface [5]	AffectNet	68.69%
6	VGGNet-Based Multimodal Facial Biometric System [6]	FER2013	66.13%
7	VGG [7]	FER2013	72.7%
8	ResEmoteNet [8]	FER2013	79.79%
9	Custom Lightweight CNN Model [9]	RAF-DB	84%
10	Regularized Xception Model [10]	FER2013, CK+, and an augmented version of Google FER	94%

## REFERENCES

- [1] A. Murtada, O. Abdelrhman, and T. A. Attia, "Mini-ResEmoteNet: Leveraging knowledge distillation for human-centered design," *University of Khartoum*, Jan. 2025.
- [2] S. Vignesh, M. Savithadevi, M. Sridevi, and R. Sridhar, "A novel facial emotion recognition model using segmentation VGG-19 architecture," *Int. J. Inf. Technol.*, 2023.
- [3] J. Cai, Z. Meng, A. S. Khan, Z. Li, J. O'Reilly, and Y. Tong, "Island loss for learning discriminative features in facial expression recognition," *arXiv preprint arXiv:1710.03144*, Oct. 2017.
- [4] Y. Khairuddin and Z. Chen, "State of the art performance on FER2013," *arXiv preprint*, May 2021.
- [5] H. Liu, R. An, Z. Zhang, B. Ma, W. Zhang, Y. Song, Y. Hu, W. Chen, and Y. Ding, "Norface: Improving facial expression analysis by identity normalization," *arXiv preprint arXiv:2407.15617*, Jul. 2024.
- [6] M. Rabea, H. Ahmed, S. Mahmoud, and N. Sayed, "IdentiFace: A VGG-based multimodal facial biometric system," *arXiv preprint*, Jan. 2024.
- [7] C. Pramerdorfer and M. Kampel, "Facial expression recognition using convolutional neural networks: State of the art," *arXiv preprint arXiv:1612.02903v1*, Dec. 2016.

- [8] A. K. Roy, H. K. Kathania, A. Sharma, A. Dey, and M. S. A. Ansari, "ResEmoteNet: Bridging accuracy and loss reduction in facial emotion recognition," *arXiv preprint arXiv:2409.10545v2*, Nov. 2024.
- [9] M. C. Gursesli, S. Lombardi, M. Duradoni, L. Bocchi, A. Guazzini, and A. Lanata, "Facial emotion recognition (FER) through custom lightweight CNN model: Performance evaluation in public datasets," *IEEE Access*, 2023, doi: 10.1109/ACCESS.2023.0322000.
- [10] E. A. A. Azrien, S. Hartati, and A. Z. K. Frisky, "Regularized Xception for facial expression recognition with extra training data and step decay learning rate," *IAES Int. J. Artif. Intell.*, vol. 13, no. 4, pp. 4703–4710, Dec. 2024, doi: 10.11591/ijai.v13.i4.pp4703-4710.