

Peer Review

Review of: "Semantic Data Augmentation for Long-tailed Facial Expression Recognition"

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The paper demonstrates technical soundness and addresses a significant issue in Facial Expression Recognition (FER) by proposing semantic data augmentation using VAE-GAN. Here is a concise review based on the provided aspects:

The methodology is well-structured, leveraging established architectures (e.g., VAE-GAN, ResNet) with clear mathematical formulations. The evaluation metrics are appropriate for the FER task.

The paper is organized logically with sufficient visualizations (e.g., Figures 2–5) to illustrate the results and methods. However, some sections (e.g., training specifics) could benefit from more detail.

Suggested Improvements

- Clarify the training details of the VAE-GAN.
- Discuss the limitations and potential drawbacks of the approach.
- Consider presenting comparisons with additional state-of-the-art methods for broader validation.

Declarations

Potential competing interests: No potential competing interests to declare.