Title: ResMem-Net: Memory based deep CNN for image memorability estimation (#61139)

- 1. The literature review should mention more recently published papers, i.e, models published in the year 2020.
- 2. No mathematical equations (or) pseudocode have been given for the optimization function. Also, the difference between ADAM optimizer and the optimization function used for the proposed architecture needs clear explanation. The line "It adds the cost function the cost function to ensure that our learning path is much smoother and can converge at a good minimum" isn't sufficiently clear.
- 3. It has been mentioned in the paper that the model has been trained using the Mean Squared Error (L2) loss function. However, there is no comparison of the final L2 scores of the proposed model and the final L2 scores of the previously proposed models.
- 4. In what way does Global Average Pooling improve generalizability? It is mentioned in the manuscript that the Global Average Pooling helps prevent over fitting, but the reasoning behind that statement requires explanation.
- 5. Approximate runtime for processing an image using the model during inference should be provided in computational complexity analysis.
- 6. Include comparison table of proposed model to traditional non-Neural Network based models.
- 7. In results and discussion section, provide information about why the proposed model is able to provide better results than the other models.
- 8. Explain why Spearman's Rank correlation is used to compare the models. The model has been trained with L2 loss, so why isn't it used to evaluate the proposed model.
- 9. During the qualitative analysis, is the model's accuracy evaluated with images outside of the mentioned datasets?
- 10. The inferences made in the qualitative analysis section should be backed with more statistics.
- 11. In the Dataset Used section, information regarding how the data was collected and tagged, and the distribution of the memorability scores needs to be discussed.
- 12. The meaning of the variables used in the equations should explained after each equation is mentioned.
- 13. The conclusion is not covering the drawbacks of the current manuscript.