



SDI Review Form 1.6

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| Journal Name: | Journal of Advances in Mathematics and Computer Science |
| Manuscript Number: | Ms_JAMCS_48716 |
| Title of the Manuscript: | An Investigation of the Use of Eigenvalues in Human Face Modeling for Recognition Tasks |
| Type of the Article | |

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

| | Reviewer's comment | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|-------------------------------------|---|--|
| Compulsory REVISION comments | <p>Please let me communicate mandatory revisions to this paper:</p> <ol style="list-style-type: none"> 1) The abstract appears as an introduction and would require references. Consequently, rewrite the entire abstract and clearly state what this paper is about including a concise summary of the findings. 2) In the conclusions "moving average filter" is mentioned six times, however, the manuscript does not clearly define that particular filter. Is it a Savitzky-Golay filter, is it a weighted average? 3) There are several statements that need specific details, e.g., what exactly is meant by "eigenvector" – do you calculate a singular value decomposition, and of what? What exactly is the role of the neural network? <p>Overall, please provide scientific detail with mathematical rigor and with clear description of the filters that were utilized.</p> | <p>Thanks a lot for your valuable comments. My answers as the following:</p> <ol style="list-style-type: none"> 1) Corrected as required. 2) In section 2 of the paper (Method) point 3, I clarified the purpose of using the moving average filter. At the end of the point 3, more clarification about the MAF is added as required. After the first three experiments, where the results are represented in table 1, 2, and 3, respectively, In order to improve the results of the proposed method, additional five filters were tested, and they are listed from a – e (line 177-184). Savitzky-Golay filter (SGF) is one of them, the third one between the proposed five filters. 3) I agree with you that the mentioned eigen theory, moving average filters, and neural networks used in this paper are very important, where the proposed method constructed by using them. However, each of these subjects are mathematically defined in literature and their use for different applications. Eigenvector also used for face recognition which called Eigenface, and that mentioned in the introduction (line 42-45) and the details of its use are in references [12-14]. In this paper, I used the eigenvalue to extract the features for each image. In section 2 of the paper (Method) point 2, I clarify how I use it. For the programming, I used the "Eig" Matlab function. Moving average filters are used for cutting the edges for enhancing the recognition rates. Mentioned in section 2 of the paper (Method) point 3. Probabilistic neural networks is used for classification. Mentioned in the last paragraph in the introduction (line 58) and in section 2 of the paper (Method) point 4. It used for classification in [24] also. |
| Minor REVISION comments | Please improve some sentence construction, however, most important are edits regarding scientific contents! | <p>After revising the presented paper, many corrections where added to the text, which really enhanced the presentation of the study. Therefore, I would like to thank you for your constructive criticisms.</p> <p>P.S.: All corrections were highlighted in yellow in the origin text.</p> |
| Optional/General comments | | |

PART 2:

| | Reviewer's comment | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|--|---|---|
| Are there ethical issues in this manuscript? | (If yes, Kindly please write down the ethical issues here in details) | |