# Author’s Response to the Review Comments

***Journal* : Jurnal Elektronika dan Telekomunikasi**

***Title of Paper* : Determination of the Best Wavelet Basis Function for Indonesian Vowel Voice Signal**

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We appreciate the time and efforts by the editor and referees in reviewing this manuscript. We have addressed all issues indicated in the review report, and believed that the revised version can meet the journal publication requirements. We have included the line numbers in the revised manuscript to help the reviewers identify our changes.

| **Comment** | **Response** | **Location of Response in Revised Manuscript** |
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| **EDITOR’S COMMENTS** |  |  |
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| **REVIEWER 1 COMMENTS** |  |  |
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| The paper has been well delivered and written, but we still found some grammatical error. | We’ve corrected the grammatical error using several online grammar checkers. |  |
| Why in this study only used vowel voice signal data, not others? Are there any relations with the feature extraction process that will be processed by wavelets? | We only used vowel voice it’s according to Table 1 where the Indonesian syllables are mostly composed by vowel voice. Yes, it was mentioned in future work of this research. | Section:  Conclusion, Paragraph 2. |
| In the introduction section, this paper mentioned the wavelet is generally used for feature extraction process of speech signals.  The method in this paper analyzes that the base function of the db45 wavelet is the most appropriate feature extraction for male and female vowel voices of Indonesian language. Is this db45 wavelet works significantly for vowel voices feature extraction of children, teenage, and adult voices? | In this research we only used 50 adult speakers. So, there is analysis of children and teenage voices. | Section II B, Line 80, column 2. |
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| The idea is very interesting. This paper provides sufficient information and in-depth discussion. Although the research contribution and the novelty of this paper are very limited, the author has well delivered a significant part of the process in the development of voice signal processing techniques. |  |  |
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| **REVIEWER 2 COMMENTS** |  |  |
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| The structure should be re-arranged. -       Section III contains the result; it is contradictive with the title "design implementation and analysis." -       Design and Implementation should to separated with The Result and Analysis into a different section. So, it can be distinguished clearly what is your original work. Alternatively, just change the title with "Result and Discussion/Analysis." | We’ve changed the subtitle of section III as suggested. | Line 300 |
| According to the result that there are inconsistencies in determining the best wavelet basis function for each Indonesian vowels, the title might be changed to " Determination of......" | The title of this article (in English and Indonesian language) has been changed as suggested. | Line 1 - 4 |
| In the introductory section, the problem should be described clearly! -       Has the introduction of vowels in Indonesian never been done before? If ever done, please show the references and deficiencies that want to be fixed by this research. -       Ref [4-6] applied wavelet Daubechies. Please give a reason why this method is adopted? -       Please give a reason why cross-correlation algorithm is used to determine the basis wavelet function in this paper. | * It’s ever done; the references and the deficiencies have been described. * Wavelet Daubechies applied in this research because it’s a non stationary alike voice/speech signal. * The use of cross-correlation method to determine the best basis wavelet has been explained. | Section: I   * Line 44 -50, column 2 * Line 36 – 38, column 2 * Line 80 – 84; Section II.E, Line 192-193; |
| In section II.C  -       Variable in equation (1,2) must be explained! -       Why is Hamming window chosen? | - The variables in equation 1,2 have been explained.  - The reason to use Hamming window have been explained. | Section: II C  113—114, column 2. |
| In section II.E, What are the meaning of index x and y in equation 4 & 5? | The index x and y in equation 4 and 5 have been described. | Section: II E  Line 184-185 |
| In section II.H. The flowchart in Fig. 1 is modified from Ref. [9]. Please describe the modification! | The modification have been described. | Section: II H  Line 270-271 |
| Figure 1. should be shown before Figure 2? | The sequence of the image have been changed | Line 279 and Line 309 |
| In section III, "The computation time for all Indonesian vowel signals is influenced by the segmentation length. It’s increased as the segmentation length decreased. The increase of computation time is twice for each segment, approximately." Could You show the graph or data related to this argument? | The table that shows the result of computation time for each length of segment was added. | Section: III  Table 3  Line 317-318 |
| Quality of Figure 1 & 2 should be improved | The quality of these pictures have been improved. | Line 279 and Line 309 |
| Based on the result on Table 3, the inconsistency starts at long segment  (2048). It will be interesting if you extend the evaluation for the more long segment (~4096) | We’ve added the evaluation until 4096 segmentation length, the results showed in Table 4 – Table 7. The abstract, discussion and conclusion have been adapted for this improvement. | Section: III  Table 4, Table 5, Table 6, and Table 7.  Line 328 – 331.  Abstract : Line 14-16 and Line 29-31  Conclusion : Line 333-334, column 2 |
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| This paper describes the experiment to determine the basis wavelet function from Indonesian vowel speech signal. The idea is interesting and has an original experiment with a special case for Indonesian voice. However, the author should give the problem statement (background) clearly in the introduction section, the importance of this he research related to the investigation of this area (Indonesian speech). According to the result, it is still inconsistent to conclude, but it will be useful for the future work of the community. |  |  |
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