DO NOT USE Generative AI tools to produce any of the paper sections.

Paper Title

Author's name, affiliation, and email

Abstract
An abstract is a single paragraph, without indentation, that summarizes the key points of the manuscript in 150 to **250 words**.

Keywords: keywords should reflect the central theme, problem, methods, and contribution. You can use the keywords to compose a meaningful paper title.

1. Introduction

1.1. What do we know so far about the problem?

1.1.1. What is the problem? Define the problem that you have addressed in your work. Focus on the constraints that make the problem challenging.

1.1.2. Why is it important? Here, you should illustrate the motivation behind finding a solution to this problem and not necessarily your own solution. What is the significance of solving this problem? What are the benefits we will save or gain, and what is the impact of the solution?

1.1.3. Are the current solutions not good enough? Why do we need your solution? What does your solution bring to the table?

At the end of the introduction section, you must state the organization of your paper: “What are the next sections, and what do they contain?”

2. Literature Review

2.1. Concise, critical, and chronological discussion of the related works

2.1.1. What are the previous works related/similar to your work?

2.1.2. Clearly state the contribution of each work: “What did they do to solve the problem that you investigated?”

2.1.3. Clearly state the advantages and disadvantages of each work. You should be critical and rational. Clearly state your opinion on what is needed to improve the related works, “if possible,” and why. This should be an attempt to highlight the contribution of your work

2.1.4. Choose a chronological order, e.g., time of publication, solution significance, etc.

Use subsections “headings” to organize your literature review and make it easier to follow.
At the end of this section, you must stress what is missed. Why do we need it? And how will you solve this problem to achieve the missing parts? With what data? And what methods? Also, you need to stress the significance of your work: “What is so special/unique” about the work?

At the end of this section, you must have a table that summarizes the most important related work that you are going to use to compare against your work. you can use information from the Excel sheet that you create to summarize the related work.

After this table, you must summarize the findings of the literature review. Clearly state what the current “research gap,” which part/component of the gap you are going to address, how, why it is needed compared to the literature, why your suggested solution is significant, etc. is.

Highlight your contribution: What is the problem, and what are the associated constraints and assumptions? Suppose the problem is the need for a new segmentation method. What are the limitations of the existing one, which is "not specific to the fundus images" and "specific to the fundus images"?

What is the motivation behind the problem's solution (i.e., what we will gain if we have your new method, what we will lose if we cannot find a new method," and how significant is that gain or loss?

3. Material and Methods

3.1. Data

3.1.1. Give a complete description of the data with descriptive statistics. Illustrate the difficulties with the data, e.g., missing values, noise, inconsistency, etc.

3.1.2. Data preprocessing: in this section, explain your efforts to clean and prepare the data to suit your analytical methods. Also, you should state the implication of this step of the further processing, e.g., expected accuracy

3.1.3. If you have a feature engineering step, you must clearly state why you need it and what background knowledge drives you to create more features. This step must be supported by a literature review. If you say that “it was based on experts’ opinion,” you must add references; otherwise, it may raise huge concerns during the review process.

3.2. Methods

In this section, you must answer the following questions
What is your research question that starts with "how" to motivate a hypothesis or more? What is your hypothesis? The hypothesis must be stemmed from and linked to the research question.
What is the experimental setup? What are the steps of each experiment (method)? How is it different from the methods in the literature that are "not necessarily the one used for Uveal melanoma in the lab"? This will result in a more generic method and not a specific application to Uveal melanoma.
What are the quality measures used to judge the quality of your output?

3.2.1. What are the hypotheses behind your solution?

3.2.2. What are the facts and/or established hypotheses that you are going to use to test your hypotheses?

3.2.3. What do you want to conclude “proof” from your hypotheses and why?

3.2.4. What are the different methods (the method must be explained in concrete steps, pseudo code, flow chart/diagrams, etc.) you will use to implement this work? What are special or unique about the methods, and how will they help you develop your solution? This is your contribution, and you need to discuss the associated novelty (What is the novelty of the method (what did you introduce, modify or add to the logic, procedure, computation, math, or architecture of the existing method? This should be compared to other methods you stated in the table at the end of the lit review to show significance.

3.2.5. Briefly state the required experiments to test and validate the hypotheses and why.

3.3. Experimental setup

3.3.1. Describe each experiment regarding input training data, testing data, training method, and algorithm steps. Each experiment's assumptions must be listed, discussed and validated. Illustrate if this is a new or less common method.

4. Results and Discussion

In this section, you must have the tables and chart with captions for self-explanatory figures and table headers. One line is not enough to understand the significance of the output.
Discuss WHY your method performs well or poorly related to the input. What input data motivates the output, and what steps in the method motivate the output?

4.1. The results and discussion section are significant to reflect your understanding of the results and how the results support your hypotheses/claims. You should report the results in figures and tables with a critical discussion on how the results may lead to a considerable improvement in solving the problem. Also, discuss how the limitations of the experiment affect the results.
4.2. The figures and table must be self-explained. The reader should not read many sections of the paper to be able to understand and interpret any given table or figure. The table and figure caption must be descriptive and very well stated.
4.3. You must concisely compare the advantages and disadvantages of other related works. Why do you think your method gave better results? Is it just the data? Is it something you add that offers a better understanding of the problem? What are the reasons that your problem is challenging to be solved? Explain what you did to overcome this difficulty
4.4. Highlight the results that supported and unsupported your hypotheses or claims and clearly state why.
4.5. How can we use the results in other applications? How would you know that your results are not inclusive? Did you overfit your classifiers? Can you recommend how to incorporate your results into a more extensive system?

5. Conclusion, Limitation, and Future Work

Have a conclusion summarizing the efforts (what the findings are and what we can learn from that work) and address the limitations in future work with another experiment.

5.1. Briefly summarize the paper and state clearly, “What does the paper add? " This is your contribution; be careful! Your contribution must go beyond using existing blocks, simple lab experiments, restating facts, and/or an effort leading to **obvious** conclusions. It should be concise, rational, realistic, and solid, with an interesting conclusion that adds to our understanding of the problem.
5.2. **INTERESTING USAGE SCENARIOS (how to generalize the results to other use cases in other fields)**
5.3. What are the limitations of your results compared to others?
5.4. The future work section should contain a feasible rational solution to the work limitation you want to pursue afterwards.

6. References

Use MyEndNote or other tools for citing related works

General practice

1- **Never use fixed value parameters without justification**. For example, suppose you are using a neural network to classify an object. It would help if you justified why you selected the neurons in the hidden layers to be 10 or 100. Your selection must be justified by literature or by an experiment to find the optimal value for this specific parameter.

2- Use VISIO or LucidChart to develop flowcharts and UML diagrams.
3- Use high-resolution figs and illustrations.
4- **Use more formal words, not email-style communication words, e.g., really, actually, etc. Read a couple of papers published in the target journal to understand the accepted language and style.**
5- Use a table to describe the data characteristics and state their descriptive statistics
6- —The comparison table must be clear and contain the citation ref number for each work against which you are comparing your work.
7- Use tables to list the experiments and the conclusion of every experiment and how it helps in hypotheses testing and the validation of the methods
8- Use headings and subheadings to organize your paper according to the Journal format.