
Submission of Manuscript - Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications

1 pesan

Rika Rosnelly (Universitas Potensi Utama) <rikarosnelly@gmail.com>

1 Juni 2023 pukul 18.51

Kepada: "Editor (JoWUA)!" <editor@jowua.com>

Cc: Bob Subhan Riza <bob.potensi@gmail.com>, hajjahsuparni@gmail.com

Dear Editor,

I hope this email finds you well. I am writing to submit a manuscript for consideration in the Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications. The manuscript is titled "Comparative Analysis of Support Vector Machine and Convolutional Neural Network for Malaria Parasite Classification and Feature Extraction."

In this study, we address the significant challenge posed by malaria, an infectious disease that can be life-threatening if not treated promptly. Malaria is caused by the plasmodium parasite, transmitted through the bite of Anopheles mosquitoes. Current methods of diagnosing malaria rely heavily on microscopic examination, which is subject to limitations in accuracy and efficiency due to its dependence on human expertise. Furthermore, alternative techniques such as Rapid Diagnostic Test (RDT) and Polymerase Chain Reaction (PCR) are often unaffordable in underprivileged areas.

To overcome these challenges, we conducted a comparative analysis of classification methods, specifically Support Vector Machine (SVM) and Convolutional Neural Network (CNN), to identify the type of malaria parasite and its stage. Additionally, we developed a feature extraction algorithm called the PEMA and KEHE feature tracking algorithm, which plays a crucial role in the identification process. Our algorithm extracts pertinent features from images of malaria parasites, including perimeter, eccentricity, metric, area, contrast, energy, homogeneity, and entropy.

The classifier employed a CNN architecture to categorize samples into 16 classes, encompassing four types of malaria parasites and their respective stages. The dataset comprised 446 images of malaria parasites. Our findings indicate that by utilizing the SVM classifier in conjunction with the PEMA and KEHE feature tracking algorithm, we achieved a commendable accuracy value of 85.08% for identifying the type of malaria parasite. In comparison, the CNN approach yielded an accuracy value of 61.40%.

We believe that the results presented in this manuscript are valuable contributions to the field of malaria diagnosis, particularly in resource-constrained settings. The outcomes of this study shed light on the effectiveness of SVM and CNN techniques for malaria parasite classification and emphasize the significance of feature extraction algorithms.

The manuscript has not been published elsewhere, and all authors have approved its submission to the Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications. We have carefully followed the journal's submission guidelines, and the manuscript is attached herewith for your convenience.

We kindly request that you consider our submission for publication in your esteemed journal. We believe that our research aligns well with the journal's scope and will be of great interest to its readership. We are confident that our work will contribute significantly to advancing the understanding and application of wireless mobile networks, ubiquitous computing, and dependable applications.

Thank you very much for your time and consideration. We look forward to receiving your favorable response.

Sincerely,

Rika Rosnelly
Universitas Potensi Utama

 **Full Paper.docx**
6926K



Rika Rosnelly <rikarosnelly@gmail.com>

Thank you for your submitting Paper ID - 3091878

1 pesan

Editor (JoWUA)! <editor@jowua.com>

01 Juni 2023 20.18

Kepada: rikarosnelly@gmail.com

Dear Rika Rosnelly*, Bob Subhan Riza, S Suparni.

Thank's for submitting your manuscript,
"Comparative Analysis of Support Vector Machine and Convolutional Neural Network for Malaria Parasite Classification and Feature Extraction" to Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)!

The submission id is: 3091878

Please refer to this number in any future correspondence.

You can keep track of the status of your manuscript by accessing the journal web site <https://jowua.com/article-status/>.

If you forgot your password, please click the Forget Password link on the Login page at <https://jowua.com/forgot-password>.

Regards,

Journals Editorial Office Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)!



Revisions requested Paper ID - 3091878

1 pesan

Rika Rosnelly <rikarosnelly@gmail.com>

JoWUA <editor@jowua.com>

29 Juli 2023 14.33

Kepada: rikarosnelly@gmail.com

Dear Rika Rosnelly,

We would like to inform you that the peer review process for your manuscript, "Comparative Analysis of Support Vector Machine and Convolutional Neural Network for Malaria Parasite Classification and Feature Extraction" has been completed.

Reviewers are impressed by the quality of your work and the potential impact of your research. However, they also provided a number of suggestions for improvements and further clarifications, which are detailed in the accompanying review report.

We encourage you to carefully consider all comments and recommendations made by reviewers and make any necessary revisions to your manuscript. Once you have made the requested changes, please submit a revised version of your manuscript for further consideration.

Reviewer A:

1. In the Abstract, there is no explanation regarding the problems of previous examinations to identify the 4 types of malaria parasites.
2. How the CNN and SVM architecture was developed to identify the 4 types of malaria parasites?

Reviewer B:

1. What are the basic considerations in this research using the Convolutional Neural Network (CNN) and Support Vector Machine methods as classification methods for identifying types of malaria parasites?
2. This research must explain in detail the results of the testing process using CNN and SVM?

Sincerely,
Editor



Send Revisions Paper

1 pesan

Rika Rosnelly <rikarosnelly@gmail.com>

Rika Rosnelly <rikarosnelly@gmail.com>

21 Agustus 2023 16.29

Kepada: **JoWUA** <editor@jowua.com>

Dear Editor,

Here I send revision articles for my **paper ID 3091878 with** title “Comparative Analysis of Support Vector Machine and Convolutional Neural Network for Malaria Parasite Classification and Feature Extraction”.

Thank you very much.

Best Regards

Rika Rosnelly



Full Paper Rika R-Revision.docx

7035K

Your Submission Paper ID - 30918781 pesan

Editor (JoWUA)! <editor@jowua.com>

16 September 2023 12.17

Kepada: "Rika Rosnelly (Universitas Potensi Utama)" rikarosnelly@gmail.com

Dear Rika Rosnelly,

We are pleased to inform you that your manuscript, "**Comparative Analysis of Support Vector Machine and Convolutional Neural Network for Malaria Parasite Classification and Feature Extraction**", has been accepted for publication in Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)!

Paper will be published on September 30, 2023

Please remember to quote the manuscript number, Paper ID, whenever inquiring about your manuscript.

*Kindly add all authors' Designation, mail ID and their ORCHID ID.

After the reference section kindly add Author Profile with photo.

We are sending you originality report of the text.

With kind regards,

Editorial in Chief

Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)!

Full Paper-check
turnitin - 12%