ADRIAN RICHARDY KURNIAWAN (00000055489) <adrian.richardy@student.umn.ac.id>

SIML 2025 Notification for Paper 1571121214

1 message

simlt2025-chairs@edas.info <simlt2025-chairs@edas.info> Fri, Apr 25, 2025 at 10:15 AM
To: Adrian Richardy Kurniawan <adrian.richardy@student.umn.ac.id>, Irmawati Irmawati <irmawati@umn.ac.id>

Dear Mr. Adrian Kurniawan,

We are pleased to inform you that your paper **#1571121214** titled *'Vision Transformer-Based Diabetic Retinopathy Detection with Web Deployment for Clinical Decision Support'* has been **ACCEPTED** for presentation at the **2025 International Conference on Smart Computing, IoT and Machine Learning (SIML)**.

Your submission has met the high standards required by our review committee and promises to contribute valuable insights to the field of smart computing, IoT, and machine learning. We are excited about the potential impact of your work and look forward to your presentation at the conference.

For the next step, please follow the instructions below:

1. **Revise your paper(s)** according to the reviewers' comments. The detailed review is listed below this email.
    - ⚠️ Please be advised that failure to make the required revisions will result in the rejection of your paper and exclusion from the conference proceedings.
2. **Register as a speaker** (not a Participant) for each accepted paper.
    - Fill out the registration form available at https://siml.ums.ac.id/2025/registration/
    - Submit the form with proof of payment.
    - Upload proof of IEEE membership and/or student status when applicable.
    - Refer to the registration fee page to determine the correct amount to pay.
3. **Submit copyright consent via EDAS**
    - Each manuscript in the **SIML 2025 Proceedings** must include a signed copyright form.
    - Log in to EDAS, go to your accepted paper details, and click the “Copyright form” button.
4. **Final submission format**
    - Your final manuscript must strictly follow the A4-IEEE format.
    - Guidelines for preparing your camera-ready paper are available at: https://siml.ums.ac.id/2025/submission/
    - Additionally, our team has prepared a helpful guidance document to assist you in using the IEEE A4 format. You can access it here: https://ums.id/siml_guidance_of_ieee_template
    - ⚠️ Papers that do not meet the formatting requirements will not be published in the conference proceedings.
5. **Ensure metadata consistency in EDAS**
    - Please make sure that **all co-authors** listed in your paper are also added as co-authors in the **EDAS system**.
    - This is important to ensure metadata consistency between your manuscript and the conference database.

Important Deadlines:

- **Camera-ready submission:** 3 May 2025
- **Author registration:** 10 May 2025

The conference will be held in **Hybrid mode** on **June 3–4, 2025**, in **Surakarta, Indonesia**. The complete schedule will be posted on the conference website as soon as it's finalized.

We look forward to your participation in **SIML 2025** and are excited to see how your research contributes to our discussions. If you have any questions, feel free to contact us at **siml@ums.ac.id**.

Warm Regards,
SIML 2025 Organizers

Reviews

Track Chair Review:

Track Chair Review 1

Recommendation: Recommendation to accept or reject the paper

Accepted (1)

Detailed comments: Please justify your recommendation and suggest improvements in technical content or presentation.

This paper presents a web-deployable diabetic retinopathy (DR) detection system based on the Data-Efficient Image Transformer (DeiT), achieving an accuracy of 89.60% on the APTOS2019 dataset. The integration of deep learning with real-time web-based access for clinical decision support is a timely and impactful contribution. All reviewers recommend acceptance and highlight the strengths of the work, including its robust methodology, detailed evaluation, and practical deployment. However, several areas require revision. These include improving figure readability, correcting table labels, addressing overfitting concerns, providing stronger justification for hyperparameter choices, and enhancing discussions on computational efficiency, model explainability, and data privacy in clinical deployment. The authors have responded constructively to all reviewer comments, and their planned revisions are appropriate. One remaining concern is the formatting and consistency of references, which should be thoroughly polished to meet IEEE standards. Overall, this is a solid contribution with clear clinical relevance and technical merit. I recommend acceptance with minor revisions.

Reviewer Comments:

Review 1

Detailed Comments: Please justify your recommendation and suggest improvements in technical content or presentation.

- Please define all abbreviations in their full terms at the first mention in the text. Check, PHP, HTML, CSS, SQL, DeIT, etc.
- Figures 3 and 4 are too small. Please consider using larger images.
- Please recheck the last row of Table II. It should be named 'Testing', not accuracy.

Review 2

Detailed Comments: Please justify your recommendation and suggest improvements in technical content or presentation.

1. please provide us with the more obvious figures; the letter is too small and unreadable
2. add the discussion, so you can explain your finding
3. Why is there no following figure like figures 13, 14, and so on? related to the image execution using your web based system.

Review 3

Detailed Comments: Please justify your recommendation and suggest improvements in technical content or presentation.

Strengths:

1. Innovative Integration of State-of-the-Art Techniques: The paper effectively combines a cutting-edge vision transformer (DeiT) with web deployment. This integration not only improves DR detection accuracy but also enhances the accessibility of the system for real-time clinical support.

2. Comprehensive Methodology: The authors provide detailed descriptions of each phase, from dataset preparation and augmentation to model training and system integration. The inclusion of extensive preprocessing steps and model adjustments is commendable.

3. Robust Evaluation and Metrics: The paper presents a thorough evaluation of the model's performance using multiple metrics (accuracy, precision, recall, F1-score) as well as confusion matrices to highlight class-specific strengths and weaknesses. This detailed analysis offers valuable insights into the model's ability to differentiate between various DR severity levels.

4. Practical Deployment: The incorporation of a full-fledged web-based platform demonstrates the system's potential for real-world clinical applications. The use of black-box testing to validate system functionality further enhances the work's practical relevance.

Areas for Improvement:

1. Overfitting and Generalization: While the model achieves high training accuracy (93.50%), the drop in validation accuracy (87.16%) and moderate testing loss suggest some overfitting. Further discussion on strategies to improve generalization would be beneficial.

2. Hyperparameter and Computational Analysis: More detailed justification for the chosen hyperparameters (learning rate, batch size, number of epochs, and early stopping criteria) would improve reproducibility. Additionally, an analysis of computational efficiency, particularly in the context of the web-based deployment, could provide insights into scalability.

3. Security and Data Privacy: Given that the system handles sensitive medical data, a more in-depth discussion on security measures (e.g., data encryption, user authentication protocols) would strengthen the practical applicability of the web deployment.

4. Explainability Enhancements: Although the paper employs a vision transformer, the discussion on explainability could be extended. For instance, further analysis of how the model's focus (as visualized by Grad-CAM-like techniques) correlates with clinically relevant features would add value.