[Your Name]  
[Your Title]  
[Department]  
[Institution]  
[Email]  
[Date]

Editor-in-Chief  
[Journal Name]  
[Journal Address]

Dear Editor-in-Chief,

We are pleased to submit our manuscript entitled "Deep Learning-Based Malaria Parasite Detection and Classification: A Comparative Study Using YOLO and CNN Architectures" for consideration for publication in [Journal Name].

Malaria remains a critical global health challenge, with 263 million cases and 597,000 deaths reported in 2023 (WHO, 2024). Accurate and rapid diagnosis is essential for effective treatment and disease control. Our study presents a comprehensive automated malaria detection system achieving 98.8% accuracy for species classification and 93.1% mAP@50 for parasite detection, representing state-of-the-art performance on the MP-IDB public dataset.

Key contributions of this work include:

* • Systematic comparison of three YOLO versions (v10-12) and six CNN architectures for malaria detection
* • Novel shared classification pipeline reducing storage by 70% and training time by 60%
* • Comprehensive analysis of class imbalance challenges using optimized Focal Loss
* • Detailed per-class performance analysis revealing specific challenges with minority classes
* • Reproducible experimental framework with complete documentation for future research

This manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with its submission to [Journal Name]. We believe our work aligns well with the scope of your journal and will be of significant interest to your readership.

We suggest the following potential reviewers based on their expertise in malaria detection and deep learning:  
[List 3-5 suggested reviewers with affiliations and emails]  
  
We look forward to hearing from you regarding our submission.

Sincerely,  
  
[Your Signature]  
[Your Name]  
[Your Title]