Submission Summary

Conference Name
4th International Conference on Artificial Intelligence and Signal Processing (AISP)

Track Name
Artificial Intelligence

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320

Paper Title
Detection of Diabetic Retinopathy Using CNN

Abstract
Among diabetic patients, Diabetic Retinopathy (DR) is one of the main causes of blindness; therefore, early and accurate detection is essential for successful treatments. Convolutional Neural Network, one type of deep learning technique, has demonstrated potential in automating the diagnosis of diabetic retinal disease using retinal pictures. We provide a new method in this paper for detecting diabetic retinopathy that makes use of the Inception Net architecture. Because of its reputation for processing high-resolution images efficiently, the Inception Net model is a good fit for the intricate tasks involved in retinal image analysis. We trained and assessed our proposed model using a large dataset of annotated retinal pictures, and it achieved high specificity, sensitivity, and accuracy in differentiating between retinas that were healthy and those that were diseased. According to our research, deep learning-based methods like Inception Net have a great deal of promise for the accurate and fast identification of diabetic retinopathy, which will lead to better patient outcomes and enable prompt clinical intervention.

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