

A novel idea of malaria identification using Convolutional Neural Networks (CNN)(Conference Paper)

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Abstract

The research introduces a novel method to the difficulty of automated malaria diagnosis. Here we concentrate mainly on the automated diagnosis of malaria from low - quality blood spread photographs taken by a smartphone with a lens. The objective is to locate and classify the healthful and harmed erythrocytes in an impure blood spread in order to determine parasitemia. Despite the lower quality camera lens with modern digital phone equivalence with conventional high-end light microscopes, these photographs cannot be processed using conventional algorithms. This is why we use a pixel classifier framework in the Convolutional Neural Networks (CNN) to concentrate erythrocytes. We also classify them with a convolutional neural network since object classifier. The area of malaria diagnosis, our system can offer experts to reduce the workload and increase the accuracy of the conclusion without human intercession or as a guide. The algorithm effectively locates erythrocytes with a normal affectability of 97.33% and an accuracy of 92.32%. In terms of low competition with two human specialists, the classification was inadequate. It know how to because of the moderate photograph standard or the constrained measure of preparing information that can be gotten to around then. © 2018 IEEE

Author keywords

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