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Eye Disease Prediction System

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ABSTRACT

The aim of this study is to develop an advanced eye disease prediction system that can predict the onset of the three most prevalent eye conditions, namely cataract, uveitis, and conjunctivitis. The system will be built using cutting-edge machine learning techniques and will be trained using a vast collection of eye scans obtained from patients with various illnesses. By accurately diagnosing various eye conditions, the proposed system will significantly reduce the time and effort required for manual diagnosis, without causing any harm.

The proposed system will be based on Convolutional Neural Network (CNN) architecture consisting of 27 layers. This CNN model will be trained using a large dataset of eye scans, which will enable it to make accurate predictions about the presence of eye diseases. The model accuracy achieved in this study is 77%, which indicates that the system is highly reliable and trustworthy.

The development of an accurate and reliable eye disease prediction system will have a significant impact on the medical industry. By improving the standard of eye care and lowering the chances of misdiagnosis, this system will enable doctors to make faster and more accurate diagnoses, which will ultimately lead to better patient outcomes. Additionally, the findings of this study will provide valuable insights into the creation of trustworthy and accurate diagnostic tools, which can be applied to other medical domains.

Keywords: *Deep Learning, Image processing, Eye disease detection system, Convolutional Neural Network*