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# Detection Analysis of Abnormality in Kidney using Deep Learning Techniques and its Optimization

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Chronic kidney disease (CKD) is a global health burden that affects approximately 10 % of the adult population in the world. It is also recognized as the top 20 causes of... **View more**

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##### Abstract:

Chronic kidney disease (CKD) is a global health burden that affects approximately 10 % of the adult population in the world. It is also recognized as the top 20 causes of death worldwide. Unfortunately, there is no cure for CKD however, it is possible to slow down its progression and mollify the damage by early diagnosis of the disease. Therefore, the use of modern computer-aided methods is necessary to aid the traditional CKD diagnosis system to be more efficient and accurate. Our proposed model is RCNN to classify the Tumour Area in the X-ray Kidney Image. Compare the Deep Learning Techniques of Mask RCNN Model with other models. Evaluated model is compared with other models by metrics of the Mask R-CNN model and Tuned Hyper parameter CNN Model. It gives Training accuracy of 0.9861 and testing accuracy of 0.9389 in the 5th Epochs of Mask RCNN Algorithm. And also, method uses More Metrics of PrecisionRecall, and F1-Score by comparing the RCNN Model and Hyper tuned CNN Model.

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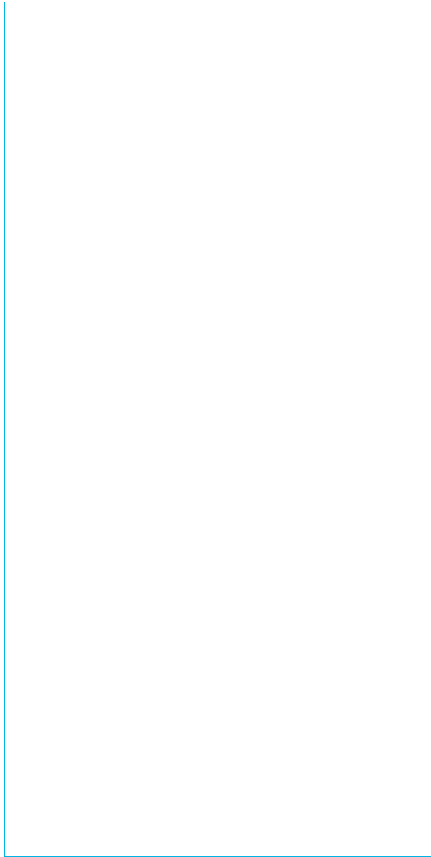
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