

Title: Machine Learning based Diagnosis of Kidney Abnormality Recognition on CT Scan Images

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Abstract: The healthcare industry has witnessed a surge in the adoption of machine learning due to its capacity to detect and predict diseases. The integration of machine learning and artificial intelligence (AI) is increasingly prevalent in the healthcare industry for problem-solving purposes. Kidney abnormalities (KA) are increasingly prevalent in Bangladesh. The exacerbation of this threat to public health is a lack of information and substandard lifestyle choices. There is an urgent need for effective methods to track and monitor the kidney health of individuals in order to buck this trend. Kidney Abnormality, Monitoring, and Analytics (KAMA) endeavors to resolve this concern by developing a sophisticated machine learning system that can promptly and accurately identify and evaluate kidney conditions, differentiating between normal and abnormal states. In an effort to identify kidney abnormalities with precision, the dataset was partitioned into train and test subsets. Both GoogLeNet and a meticulously designed Convolutional Neural Network (CNN) produced the most favorable results.

Keywords: Kidney Cancer , Diagnosis , Abnormality , Evaluation , Transfer learning

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