**EARLY DETECTION OF CHRONIC KIDNEY DISEASE USING MACHINE LEARNING**

**ABSTRACT**

Chronic kidney disease (CKD) is a general term covering heterogeneous disorders with an overarching definition of having markers of kidney damage or decreased [glomerular filtration rate](https://www.sciencedirect.com/topics/medicine-and-dentistry/glomerular-filtration-rate) (GFR). Chronic Kidney Disease (CKD) results in damage to the Kidneys. It is a global health problem and many people are losing their productive years of life. The 40% of persons with CKD are completely unaware that they have it, unlike other diseases CKD can't be cured unless it is predicted in early stages. So, in this research, blood pressure and diabetes state of patients are collected because they are important indicators of whether or not a person has CKD. The usage of various machine learning techniques such as Random Forest, XGradient boost and Support Vector Machines are proposed in this research to overcome the problem and detect the disease in early stage. In this research, CKD dataset is used to predict if a person is affected by CKD or not.