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Kidney Disease Prediction with Encrypted Data Sharing in Healthcare

Dr K. Velmurugan¹, D. Divya², P. Durgashini³, K. Mahalakshmi⁴, S. Mirudhulani⁵

Head of the Department, Department of Computer Science and Engineering¹ Students, Department of Computer Science and Engineering^{2,3,4,5} Anjalai Ammal Mahalingam Engineering College, Kovilvenni, Tamil Nadu, India

Abstract: A vital component of contemporary healthcare is disease risk assessment, which makes it possible to estimate a person's propensity to develop particular medical problems. Analyzing a variety of risk factors, including age, gender, lifestyle decisions, past medical history, and genetic susceptibility, is part of this procedure. The ability to access vast healthcare datasets and the development of sophisticated machine learning algorithms have greatly increased the accuracy of illness risk prediction. Using machine learning techniques, this proposed strategy offers an outline of the methodology involved in kidney disease prediction. Kidney disease Prediction seeks to enable early detection and intervention by utilizing machine learning (ML) techniques, such as Support Vector Machines (SVM), to predict the risk of kidney disease based on user query data. The project intends to increase treatment efficiency, improve quality of life for those at risk of renal disease, and expedite healthcare delivery through the integration of an appointment booking system and secure exchange of prescriptions and ideas. Utilizing the findings of the disease risk assessment, customized preventative plans are created based on the risk profile of the individual. These tactics could involve genetic counselling, specialized screening techniques, lifestyle adjustments, or preventative medicine. In order to keep models current with the most recent developments in medicine and data patterns, they must be continuously monitored and adjusted

Keywords: Dataset Collection, Preprocessing, Model Build, Query Data, Support Vector Machine, Disease Classification, Appointment Booking, Prescription Data, Advanced Encryption Standard, Secure Data Sharing

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