

An Early Detection Type 2 Diabetes Using K - Nearest Neighbor Algorithm

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Abstract : This research aimed at developing an early warning system for pre-diabetic and diabetics by analyzing simple and easily determinable signs and symptoms of diabetes among the people living in Malaysia using Particle Swarm Optimized Artificial. With the skyrocketing prevalence of Type 2 diabetes in Malaysia, the system can be used to encourage affected people to seek further medical attention to prevent the onset of diabetes or start managing it early enough to avoid the associated complications. The study sought to find out the best predictive variables of Type 2 Diabetes Mellitus, developed a system to diagnose diabetes from the variables using Artificial Neural Networks and tested the system on accuracy to find out the patent generated from diabetes diagnosis result in machine learning algorithms even at primary or advanced stages.

Keywords : diabetes diagnosis, Artificial Neural Networks, artificial intelligence, soft computing, medical diagnosis

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