Flower pollination algorithm feature selection for chronic kidney disease classification

Nasiru Muhammad Dankolo, Danlami Gabi and Salisu Ibrahim
Kebbi State University of Science and Technology, Aliero, Nigeria
Shehu Shagari College of Education Sokoto, Nigeria.

Chronic kidney disease is a general term for heterogeneous disorders affecting kidney structure and function. It is recognized now that even mild abnormalities in measures of kidney structure and function are associated with increased risk for developing complications in other organ systems which lead to mortality, all of which occur more frequently than kidney failure. Data mining has been a current trend for attaining diagnostic results. Huge amount of unmined data is collected by the healthcare industry in order to discover hidden information for effective diagnosis and decision making. Data mining is the process of extracting hidden information from massive dataset, categorizing valid and unique patterns in data. In this research we use flower pollination algorithm (FPA) for feature selection method to improve the classification of chronic kidney disease. The experimental result shows that there is a significance improvement in performance of classifiers when FPA feature selection algorithm is applied.

Keywords: Feature Selection; Classification; Data Mining.