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Predicting heart failure class using a sequence prediction algorithm

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Abstract

One of the major causes of death in the world is Heart Failure. This disease affects directly the heart's pumping job. Because of this perturbation, nutrients and oxygen are not well circulated and distributed. The New York Heart Association has classified this disease into four different classes based on patient symptoms. In this paper, we are using a data mining technique, more precisely a sequential prediction algorithm (CPT+) to predict to which of the 4 classes a patient belongs. The algorithm was run on a dataset containing 14 attributes representing patients' vital signs, including the class of the disease. Category prediction yielded to an average accuracy of 90.5%.

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