K-NEAREST NEIGHBOR UNTUK KLASIFIKASI PENDERITA STROKE ISKEMIK MELALUI SINYAL ELEKTROKARDIOGRAM

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ABSTRACT

Stroke or Cerebrovascular disease is a disease that can strike suddenly and cause death regardless of age, race and sex. As many as 80% is a type of ischemic stroke. Slow handling makes stroke the leading cause of death in Indonesia. Diagnosis of stroke sufferers must be carried out quickly and precisely so that they immediately know the disease they are suffering from. Because stroke is a disease in the nerves that attacks the blood vessels in the brain and causes disturbances in heart rhythm, a study was conducted on heart rate variability. By calculating the distance between the R peaks at the QRS Complex to obtain the value of the feature extraction of the Coefficients of variation RR interval (CVRR) and the Root Mean Square of the Successive Differences (RMSSD), computerized ischemic stroke classification can be performed using the k-Nearest Neighbor method. The results of this study get the highest k value in the k-Nearest Neighbor method, which is 33 with an accuracy percentage of 76.92%, a precision of 75%, and a sensitivity of 100%.

Keywords: Classification, k-Nearest Neightbor, Ischemic Stroke, ecg.