IMPLEMENTATION OF DISCRIMINANT ANALYSIS FOR HYPERGLYCEMIA STUDY CASE BASED ON URINALYSIS

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Abstract

Diabetes has become global disease in this country. Diabetes has also become the most killer disease for modern people. People with diabetes increase in every year. These are because of the bad lifestyle which they’ve done. Consuming junkfood and never do excercise cause people to get this disease.

This research try to find an alternative way to detect hyperglycemia condition as a control of blood glucose for the diabetes patient. This reasearch use urinalysis as measurement in diabetes detection. Not only cheap but also urinalysis is easier to do.

Discriminant analysis algorithm can predict membership of a group. Using discriminan analysis algorithm, data which have features selected, will be counted as discriminant value for each group using the method. The value will be compared by cutting score for each group.

From the performance testing of discriminant analysis algorithm, we can see that the accuracy of the algorithm with training dataset testing reach more than 80% so the algorithm can be believed for processing the data of urinalysis.
This undergraduated theses can explain hyperglicemia condition for diabetic patients as the first step to detect diabetes immediately.

**Keywords:** Diabetes, Discriminant Analysis, Urinalysis.