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## Evaluating the Performance of KNN Clustering Classification

Lillian Mueller lmuelle1@umd.edu Regina Hong rhong@umd.edu

## Abstract—

- I. INTRODUCTION
- II. METHODOLOGY

Listing 1. Libraries used for this assignment.

## III. RESULTS



Fig. 1. Decision Tree Utilizing Gini Impurity Criterion

| Description | Train Data Accuracy | Test Data Accuracy | r2 Score |
|-------------|---------------------|--------------------|----------|
| count       | 1000.0              | 1000               | 1000     |
| mean        | 1.0                 | 0.945100           | 0.915793 |
| std         | 0.0                 | 0.028636           | 0.044914 |
| min         | 1.0                 | 0.840000           | 0.750000 |
| 25%         | 1.0                 | 0.920000           | 0.887892 |
| 50%         | 1.0                 | 0.940000           | 0.916574 |
| 75%         | 1.0                 | 0.960000           | 0.942824 |
| max         | 1.0                 | 1.000000           | 1.000000 |
| TABLE I     |                     |                    |          |

STATISTICS FOR DECISION TREE UTILIZING GINI IMPURITY CRITERION

IV. DISCUSSION REFERENCES

[1]

[2]