# KNN-CLAS

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April 23, 2025

## 1 Introduction

This document presents a study on the K-Nearest Neighbors (KNN) classification algorithm.

## 2 Methodology

Describe the methodology used in the study.

## 3 Results

Present the results obtained from the experiments.

| Dataset | Samples | Features | Accuracy | | | |
|---|---|---|---|---|---|---|
| | | | nn-clas | 1nn-clas | 3nn-clas | 5nn-clas |
| Ionosphere | 351 | 34 | 0.87 | 0.85 | 0.87 | 0.87 |
| Binary Digits | 360 | 64 | 1.00 | 0.52 | 0.52 | 0.52 |
| Haberman | 306 | 3 | 0.71 | 0.68 | 0.69 | 0.69 |
| Pima Diabetes | 768 | 8 | 0.73 | 0.52 | 0.52 | 0.52 |
| Banknote | 1372 | 4 | 1.00 | 0.99 | 0.99 | 0.99 |
| Sonar | 208 | 60 | 0.77 | 0.85 | 0.83 | 0.81 |
| Breast Cancer | 569 | 30 | 0.93 | 0.39 | 0.39 | 0.39 |
| SPECT Heart | 349 | 44 | 0.70 | 0.95 | 0.95 | 0.95 |

Table 1: Comparison of Models on Different Datasets

## 4 Conclusion

Summarize the findings and conclusions of the study.