KNN CLAS

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***Abstract*—**

***Index Terms*—**

I. Introduction

II. Methodology

III. Results

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 I
Model Accuracy Comparison

Dataset	Samples	Features	Training (ms)		Prediction (ms)			
			nn-clas	knn-clas	nn-clas	1nn	3nn	5nn
Ionosphere	351	34	80.10	29.00	2.70	3.50	3.70	3.60
Binary Digits	360	64	246.70	95.10	3.00	3.10	3.20	3.20
Haberman	306	3	16.90	9.10	2.00	2.60	2.50	2.70
Pima Diabetes	768	8	76.90	30.70	2.10	5.00	4.70	4.90
Banknote	1372	4	299.70	58.20	3.40	3.80	3.90	3.70
Sonar	208	60	179.40	74.30	7.40	8.10	7.00	8.00
Breast Cancer	569	30	96.10	19.60	3.10	4.00	3.80	3.50
SPECT Heart	349	44	195.40	74.40	2.20	3.00	3.00	3.00

TABLE II
Training and Prediction Times

Dataset	Samples	Features	Support Samples	
			nn-clas	knn-clas
Ionosphere	351	34	101	252
Binary Digits	360	64	131	267
Haberman	306	3	54	223
Pima Diabetes	768	8	113	594
Banknote	1372	4	159	179
Sonar	208	60	143	186
Breast Cancer	569	30	8	122
SPECT Heart	349	44	98	275

TABLE III
Support Samples Count

IV. Discussion

Acknowledgment

References

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