

UNIVERSITY OF GRANADA

Dept. of Computer Science and Artificial
Intelligence

C.P. 18071, Granada, Spain

Complementary document to the
paper:

J. Luengo, S. García, F. Herrera,
On the choice of an imputation method for missing
values. A study of three groups of classification
methods: rule induction learning, lazy learning and
approximate methods.

**Complementary Document 1: Tables with the accuracy
results for the different classification methods used in the
paper**

Julián Luengo
Salvador García
Francisco Herrera

In this document we present the accuracy results obtained for each classification method. These are the complete results from the study performed in the contribution entitled:

- Julián Luengo, Salvador García and Francisco Herrera (2009). A study on the use of missing values for three groups of classification methods: interval rule learning, lazy learning and approximative methods.

Both training and test accuracy are present for each method.

We have used a 10-fcv validation scheme. Each data set have been pre-processed with 14 imputation methods. Therefore, there are 14 results for each fold, that is, the training and test partitions have been preprocessed with 14 different Missing Values estimation approaches. The mean of the 10 folds for each imputation method are represented in the rows of the Tables 2 to 24. We have stressed in bold the accuracy results which are highest among the imputation methods for a given data set, that is, the columns. Thus, we can observe the highest accuracy obtained by the classification method for a particular imputation method over each data set.

In Table 1 we have summarized the data sets used, with their acronyms. This table has been extracted from the document mentioned above for easier reference.

Data set	Acronym	# instances.	# attributes	# classes	% MV	% inst. with MV
Cleveland	CLE	303	14	5	0.14	1.98
Wisconsin	WIS	699	10	2	0.23	2.29
Credit	CRX	689	16	2	0.61	5.37
Breast	BRE	286	10	2	0.31	3.15
Autos	AUT	205	26	6	1.11	22.44
Primary tumor	PRT	339	18	21	3.69	61.06
Dermatology	DER	365	35	6	0.06	2.19
House-votes-84	HOV	434	17	2	5.3	46.54
Water-treatment	WAT	526	39	13	2.84	27.76
Sponge	SPO	76	46	12	0.63	28.95
Bands	BAN	540	40	2	4.63	48.7
Horse-colic	HOC	368	24	2	21.82	98.1
Audiology	AUD	226	71	24	1.98	98.23
Lung-cancer	LUN	32	57	3	0.27	15.63
Hepatitis	HEP	155	20	2	5.39	48.39
Mushroom	MUS	8124	23	2	1.33	30.53
Post-operative	POS	90	9	3	0.37	3.33
Echocardiogram	ECH	132	12	4	4.73	34.09
Soybean	SOY	307	36	19	6.44	13.36
Mammographic	MAM	961	6	2	2.81	13.63
Ozone	OZO	2534	73	2	8.07	27.11

Table 1: Data sets used

The results tables follow in the subsequent pages.

Imp. Meth.	Training																	Test																											
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SFO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SFO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	38.79	97.30	70.01	77.06	40.44	2.52	37.79	96.79	6.40	19.86	74.96	100.00	18.33	38.68	88.22	99.57	81.60	33.07	81.20	81.20	93.13	57.12	34.33	97.21	68.33	69.64	28.57	2.91	33.88	96.06	6.17	15.05	68.47	40.00	0.00	40.00	81.41	99.65	67.78	26.54	3.77	80.25	92.99	50.14	
EC	50.21	97.58	81.07	76.22	49.81	4.07	40.21	96.59	16.12	23.09	73.09	76.39	9.74	40.62	87.53	99.59	82.96	7.75	83.22	83.22	94.61	56.85	43.83	97.28	79.26	71.39	44.16	3.41	37.27	95.61	13.31	25.18	69.07	70.90	9.70	40.00	81.42	99.58	64.44	5.27	3.26	82.11	94.16	53.84	
KNN1	34.33	97.06	69.55	77.43	34.85	2.90	39.18	96.13	5.58	21.23	74.12	66.52	9.93	41.33	82.07	99.52	81.98	18.61	81.27	81.27	93.71	53.83	31.35	96.57	66.63	72.36	29.92	3.35	35.90	94.69	6.47	22.32	71.85	62.74	9.72	40.00	76.04	99.46	71.11	15.22	3.26	79.20	93.61	51.51	
WKNN1	36.20	97.04	70.09	76.22	35.66	2.46	37.66	96.42	5.98	21.18	74.55	65.91	10.47	40.62	81.79	99.50	81.36	17.60	80.51	80.51	93.69	53.73	34.26	96.85	66.48	69.23	27.93	2.57	34.27	94.92	5.71	24.11	69.26	59.26	8.44	40.00	75.38	99.52	68.89	12.80	3.26	77.53	93.61	50.68	
KMI	35.79	97.01	69.46	76.92	33.71	2.46	38.29	96.67	6.00	24.58	74.34	66.94	10.03	40.97	80.65	99.37	83.58	18.19	80.53	80.53	93.71	54.02	30.75	96.85	66.49	71.07	27.21	2.57	37.82	95.38	5.13	25.36	69.63	58.96	10.26	40.00	76.08	99.22	70.00	11.43	5.53	79.61	93.65	51.10	
FKMI	36.56	97.08	69.76	75.88	33.82	1.11	38.05	96.57	5.81	24.02	74.65	66.15	9.73	42.00	80.00	99.65	78.52	15.91	80.80	80.80	93.71	53.48	30.40	97.00	67.37	72.42	28.44	0.57	35.62	94.92	5.13	22.14	72.04	61.40	7.53	40.00	74.13	99.63	71.11	13.63	3.26	78.78	93.69	50.91	
SVM1	37.29	97.01	68.81	74.17	34.58	1.77	40.73	96.29	8.81	22.66	74.98	67.39	9.54	41.33	87.82	99.59	80.99	19.78	82.23	82.23	93.70	54.58	31.38	97.00	67.07	67.79	28.12	1.73	39.43	94.69	7.45	26.61	70.56	60.59	7.55	40.00	79.96	99.50	70.00	14.40	4.87	81.38	93.61	51.60	
EM	35.90	97.06	68.81	76.81	50.95	2.00	39.36	93.80	7.12	30.12	72.67	67.63	10.08	41.31	80.21	99.45	79.01	13.39	80.61	80.61	93.63	54.44	EM	32.37	96.71	62.29	70.97	44.95	1.99	37.04	91.26	7.03	28.93	69.63	60.08	9.27	40.00	76.75	99.47	72.22	78.78	78.78	93.61	51.85	
SVD1	36.64	96.87	68.97	77.89	47.12	3.35	39.81	93.78	8.15	31.30	72.45	66.43	9.69	40.62	79.57	99.51	81.11	14.56	80.62	80.62	93.69	54.54	SVD1	35.62	96.85	64.02	72.41	42.28	3.49	36.17	92.42	6.27	33.04	67.04	55.47	9.74	40.00	78.00	99.40	71.11	9.89	3.26	79.61	93.65	51.89
BPCA	37.03	97.06	68.28	76.03	35.61	1.50	39.15	96.34	4.58	24.69	74.32	66.52	9.14	40.62	81.29	99.67	78.52	18.78	80.62	80.62	93.69	53.67	BPCA	23.44	45.50	49.80	69.67	43.11	0.85	21.65	49.51	2.47	14.29	57.59	54.64	10.69	40.00	79.37	50.84	54.44	21.10	3.26	50.88	92.97	39.81
LLSI	40.12	97.06	69.28	76.65	34.58	3.25	37.84	97.34	6.87	24.40	74.69	66.82	9.79	40.62	83.87	99.63	82.35	17.68	81.88	81.88	93.69	54.37	LLSI	38.60	97.00	65.62	70.73	28.15	3.17	33.40	95.61	5.91	23.75	68.89	60.06	9.35	40.00	74.75	99.61	68.89	14.45	3.58	79.50	93.65	51.17
MC	37.77	97.06	70.00	77.47	34.90	2.65	39.21	96.44	5.60	23.41	75.37	65.97	10.72	40.62	79.35	99.72	82.35	17.51	80.83	80.83	93.69	53.99	MC	35.28	96.71	65.04	71.77	29.65	2.65	36.96	94.46	5.32	23.57	71.85	57.64	11.05	40.00	73.42	99.64	64.44	11.43	3.26	78.15	93.73	50.76
CMC	37.58	97.03	69.62	77.12	32.80	2.03	40.12	97.44	6.48	22.12	75.37	66.22	9.98	40.62	85.87	99.38	82.59	16.75	82.44	82.44	93.71	54.22	CMC	33.40	97.00	68.22	69.58	26.17	1.69	36.77	96.53	5.71	21.07	72.96	59.50	10.61	40.00	76.79	99.35	68.89	12.86	3.26	80.86	93.69	51.19
DNI	38.21	97.01	69.62	74.83	33.77	1.38	39.42	95.93	6.53	27.31	73.72	66.36	9.44	40.62	80.21	99.42	77.28	19.20	80.76	80.76	93.70	53.71	DNI	34.00	97.14	66.62	70.29	29.08	1.73	35.90	94.00	6.86	23.93	69.07	57.34	8.91	40.00	72.17	99.38	70.00	15.99	3.26	79.19	93.73	50.89

Table 2: Results for RBFN classifier

		Training																Test															
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean											
IM	36.99	93.46	66.99	76.51	34.56	21.22	34.73	97.19	20.76	22.26	59.98	100.00	21.67	82.66	88.63	89.01	75.09	37.53	5.06	80.34	93.03	58.94											
EC	51.20	96.09	75.89	77.04	47.52	24.78	33.00	97.16	14.65	19.76	60.66	76.69	8.26	76.13	88.09	93.75	70.86	35.36	81.76	81.76	91.52	58.23											
KNNI	38.28	95.17	65.99	70.71	33.11	24.78	33.94	91.62	14.26	21.81	68.62	62.53	7.43	77.44	81.58	97.15	70.37	32.67	2.90	77.89	93.74	55.33											
WKNNI	38.95	90.14	63.40	78.13	32.40	21.01	34.04	93.45	12.11	16.22	65.35	61.23	11.65	88.21	77.43	90.80	76.42	33.17	4.24	78.45	86.97	54.94											
KMI	41.77	95.84	63.17	73.85	30.71	22.91	30.38	96.16	14.39	17.69	68.95	62.20	9.69	71.90	79.00	92.94	73.09	35.37	3.88	78.52	92.57	55.00											
FKMI	36.48	90.46	65.44	73.51	32.41	23.28	30.90	96.90	18.36	12.88	66.17	62.29	12.59	89.22	77.92	95.18	70.74	30.38	3.11	80.84	93.68	55.37											
SVMi	37.18	95.58	65.88	76.96	31.17	24.78	31.75	90.13	11.07	14.76	64.57	60.87	10.67	84.10	83.21	95.19	73.83	31.66	3.47	80.74	93.60	55.29											
EM	37.34	95.71	61.75	75.22	40.66	20.87	33.09	92.86	10.28	15.07	68.35	62.08	11.31	65.32	76.56	94.56	75.68	36.45	3.15	79.57	93.73	54.74											
SVDI	40.41	95.53	61.30	75.45	37.52	17.22	32.85	90.20	16.77	12.98	68.95	63.01	12.30	67.09	75.71	93.48	73.46	32.50	3.15	80.14	93.58	54.46											
BPCA	42.17	94.45	65.09	74.87	31.74	22.01	30.69	95.21	15.49	15.07	67.10	59.42	6.14	81.54	81.44	95.91	68.02	35.18	3.33	80.89	93.67	55.21											
LLSI	39.79	91.57	65.73	72.57	27.38	22.45	31.93	95.93	18.65	18.86	67.45	62.41	7.27	69.56	82.51	92.77	70.00	35.76	4.20	79.47	93.66	54.76											
MC	38.25	95.72	65.28	78.79	29.82	24.78	32.36	85.69	18.73	15.93	63.64	62.68	10.08	76.40	79.14	93.50	72.84	30.90	3.04	78.82	91.71	54.67											
CMC	38.99	96.31	65.47	76.81	31.05	22.64	28.22	92.35	13.07	17.11	67.74	62.47	8.80	89.61	81.50	92.61	70.62	32.50	2.82	80.26	90.16	55.29											
DNI	40.63	94.39	67.26	75.17	30.61	22.91	30.87	91.52	14.45	21.62	64.07	63.47	8.66	83.05	79.93	96.72	76.67	31.30	3.11	80.58	86.25	55.39											
Test																																	
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean											
IM	32.63	92.39	63.77	67.45	28.34	21.49	28.02	94.76	23.40	13.29	61.00	40.00	0.00	56.67	76.04	88.60	56.53	23.64	5.57	78.91	93.05	49.79											
EC	46.52	94.41	71.69	65.10	39.15	24.97	31.30	93.55	14.10	15.36	59.07	63.30	9.23	43.33	73.00	93.51	60.00	23.35	2.60	80.55	90.48	52.12											
KNNI	32.33	94.86	61.28	57.59	27.12	24.97	27.64	88.50	13.32	13.21	65.56	58.42	6.17	47.50	75.58	97.01	60.00	28.90	2.27	75.24	93.37	50.04											
WKNNI	30.65	88.99	61.67	66.38	31.22	21.15	25.45	90.75	10.60	14.64	66.30	57.82	11.96	53.33	72.92	90.52	61.11	31.92	4.55	78.67	87.13	50.37											
KMI	35.33	94.42	62.27	63.08	29.15	22.97	26.85	94.47	12.53	23.75	69.63	60.32	11.94	37.50	72.83	92.63	54.44	23.46	5.18	76.59	92.07	50.54											
FKMI	31.13	88.99	62.57	60.87	23.74	24.67	24.36	93.79	17.08	13.04	66.11	61.11	11.05	50.83	69.63	95.37	47.78	27.47	3.25	79.41	93.69	49.81											
SVMi	32.68	95.14	64.31	61.33	25.96	24.97	25.19	88.87	10.27	9.11	65.74	57.34	11.88	45.83	73.67	95.17	56.67	25.60	3.90	78.04	93.57	49.77											
EM	34.56	93.84	58.20	63.04	37.06	21.73	27.65	88.96	10.67	14.82	65.37	62.81	13.75	34.17	72.92	93.76	61.11	28.90	2.61	77.95	93.49	50.35											
SVDI	33.69	93.85	58.19	64.36	40.59	17.54	26.04	85.49	15.81	11.79	65.00	61.13	12.73	43.33	70.21	93.03	60.00	25.05	3.90	76.91	93.57	50.10											
BPCA	31.30	47.78	49.50	67.80	29.32	22.75	21.10	50.42	15.69	12.86	54.26	55.45	8.46	34.17	77.42	51.28	51.11	20.38	3.26	50.15	93.29	40.37											
LLSI	35.02	89.29	64.17	64.00	28.24	23.26	27.17	90.75	18.30	15.89	67.96	58.45	7.13	43.33	75.46	92.47	56.67	27.31	4.56	77.63	93.61	50.51											
MC	29.99	92.71	65.91	68.15	26.37	24.97	26.01	82.26	19.05	8.39	62.04	60.59	8.89	51.67	78.12	93.58	63.33	18.13	3.26	76.38	91.99	50.09											
CMC	35.22	94.85	62.28	66.09	27.98	22.97	23.81	89.83	11.79	18.57	68.70	55.72	8.42	46.67	68.21	92.32	45.36	22.64	2.92	78.58	89.14	49.16											
DNI	35.33	92.85	65.19	64.67	26.36	22.97	27.68	89.18	14.58	14.46	62.22	63.06	7.91	41.67	71.04	96.84	63.33	22.09	2.94	77.63	86.18	49.91											

Table 3: Results for RBFND classifier

Imp. Meth.	Training																	Test																											
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	90.95	99.98	99.17	97.31	85.84	39.09	96.61	100.00	53.49	77.54	99.48	100.00	56.67	100.00	100.00	100.00	92.98	85.63	90.34	93.57	99.93	88.50	IM	42.75	96.35	64.45	63.22	37.99	11.90	49.05	95.83	17.92	35.19	72.63	40.00	0.00	53.33	80.40	100.00	61.94	33.22	40.38	76.02	85.55	55.15
EC	96.77	99.95	99.94	97.36	98.64	36.07	93.91	99.51	75.11	82.01	99.84	99.91	43.56	99.31	99.78	100.00	92.96	84.60	85.05	86.30	98.71	89.02	EC	45.23	96.14	77.08	61.23	74.35	12.09	46.63	93.77	23.99	27.50	76.85	72.80	11.15	47.50	74.04	100.00	67.78	24.95	32.94	80.23	89.02	58.82
KNN1	91.57	99.97	99.27	97.32	82.31	32.78	97.32	99.49	58.51	75.88	99.53	99.06	44.01	99.30	99.00	100.00	93.21	82.08	86.36	92.88	97.72	87.03	KNN1	37.97	95.86	63.29	65.04	30.45	10.63	48.51	94.68	20.53	31.61	75.74	60.89	11.62	47.50	59.25	100.00	61.11	31.98	33.58	76.07	79.40	54.08
WKNNI	91.60	99.95	99.35	97.86	87.70	33.22	96.68	99.49	57.03	77.62	99.20	98.55	45.42	99.66	99.28	100.00	93.09	83.09	83.89	92.99	99.95	87.41	WKNNI	33.63	95.00	64.02	62.56	36.67	11.38	54.23	94.68	19.76	31.07	74.81	54.06	10.59	47.50	63.75	100.00	57.78	35.71	33.53	74.62	86.98	54.73
KMI	91.38	99.71	99.10	97.67	86.09	35.27	94.77	99.67	44.34	76.62	99.84	98.61	39.93	97.22	99.57	100.00	93.33	84.59	83.39	92.72	99.97	86.37	KMI	35.58	95.14	64.16	62.23	32.83	11.56	49.04	94.23	17.69	23.93	75.74	61.43	11.42	47.50	60.04	100.00	62.22	28.85	35.51	74.92	88.48	54.66
FKMI	90.29	99.49	99.39	97.59	83.57	34.31	96.32	99.67	54.71	68.62	99.65	98.73	46.50	100.00	100.00	100.00	92.84	80.15	82.37	93.27	99.96	86.50	FKMI	35.58	95.14	64.16	62.23	32.83	11.56	49.04	94.23	17.69	23.93	75.74	61.43	11.42	47.50	60.04	100.00	62.22	28.85	35.51	74.92	88.48	54.66
SVM1	91.71	100.00	99.35	97.59	82.49	32.98	97.17	99.80	55.64	64.06	99.49	98.46	41.20	100.00	99.93	100.00	93.58	84.09	85.41	93.99	99.95	86.52	SVM1	36.57	96.00	62.99	68.53	34.85	11.32	48.76	95.16	19.76	25.36	74.63	58.15	10.61	50.83	74.92	100.00	62.22	29.67	36.91	75.45	86.94	55.22
EM	85.08	99.08	99.31	97.59	87.87	14.76	96.41	96.85	56.68	70.62	99.59	98.40	41.00	100.00	99.64	100.00	93.33	83.00	81.58	93.43	99.09	85.44	EM	33.62	95.43	59.81	64.32	48.78	7.40	49.62	91.26	20.16	27.68	74.26	57.03	3.95	56.67	67.13	100.00	65.56	27.42	30.06	75.03	79.12	54.14
SVD1	90.87	100.00	99.34	97.55	83.90	19.89	96.23	98.41	56.55	74.74	99.55	98.40	34.51	99.66	99.43	100.00	92.84	82.92	81.94	93.37	99.93	85.71	SVD1	38.96	96.00	60.53	67.46	49.14	11.73	47.67	90.11	16.19	27.68	72.78	59.77	3.58	60.00	66.46	99.98	65.56	27.42	30.06	76.49	85.08	54.89
BPCA	90.28	100.00	99.18	97.24	87.85	33.30	95.13	99.77	53.21	76.30	99.57	98.94	42.43	99.31	99.36	100.00	93.21	80.64	85.27	92.79	99.91	86.84	BPCA	36.94	45.21	51.97	93.73	82.16	30.78	19.78	50.20	33.65	3.75	57.59	53.82	16.78	28.33	73.54	100.00	62.22	28.90	34.60	75.03	79.12	54.14
L1SI	89.73	99.95	99.63	97.63	84.72	35.75	96.71	100.00	54.08	78.83	99.53	98.70	43.85	98.97	99.86	100.00	93.09	83.51	82.63	92.64	99.96	87.13	L1SI	35.60	96.00	63.72	66.17	31.03	17.21	47.72	94.92	19.96	28.75	76.85	58.44	10.61	47.50	68.83	100.00	56.67	26.54	31.96	74.93	85.48	54.23
MC	91.38	99.98	99.34	97.20	82.44	32.95	96.99	99.64	55.83	83.63	99.61	98.85	43.85	99.66	99.00	100.00	93.21	84.09	81.21	93.20	99.95	87.24	MC	35.30	96.43	63.72	62.20	38.20	12.02	50.98	94.69	19.56	28.39	74.26	60.88	10.24	57.50	52.08	100.00	55.56	32.69	37.16	74.93	83.54	54.30
CMC	92.22	99.95	99.35	97.78	87.39	41.13	92.48	99.80	56.00	77.47	99.49	99.28	43.56	100.00	99.93	100.00	92.96	83.76	87.95	92.47	99.97	87.76	CMC	38.90	95.86	64.74	63.71	35.85	15.55	48.77	96.54	13.69	34.29	75.37	58.97	12.41	41.67	74.79	100.00	62.22	28.24	34.27	76.07	87.37	55.20
DNI	89.73	99.98	99.34	97.71	81.54	35.10	98.14	99.59	49.66	78.82	99.49	97.92	44.25	100.00	99.71	100.00	93.21	81.23	84.07	93.99	99.86	86.83	DNI	40.26	96.42	62.27	66.08	30.62	12.48	50.44	94.23	16.92	28.93	74.81	59.53	10.22	47.50	63.38	100.00	61.11	26.70	38.44	75.76	85.72	54.37

Table 4: Results for RBFNI classifier

Imp. Meth.	Training																	Test																										
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	84.40	98.29	90.37	77.58	93.71	65.91	96.89	97.32	95.06	90.36	64.26	100.00	65.00	88.90	93.14	100.00	71.77	72.65	95.53	85.44	98.82	86.92	53.52	94.73	84.70	76.92	80.93	39.84	93.53	96.58	68.38	63.14	64.62	40.00	0.00	83.33	82.98	100.00	68.89	63.03	87.07	82.32	91.12	72.17
EC	73.41	97.20	90.61	76.30	92.51	66.24	97.56	97.49	86.14	91.52	76.95	87.56	90.12	87.12	86.45	100.00	71.73	77.02	95.84	84.72	95.55	86.76	53.75	95.13	86.37	74.51	73.52	41.22	93.42	95.85	62.17	65.89	72.59	83.66	78.42	43.33	83.88	100.00	67.78	60.82	85.71	82.84	93.53	75.92
KNNI	84.71	98.01	90.50	76.26	94.09	63.92	97.63	97.18	95.31	91.95	70.76	88.50	90.26	86.43	88.32	100.00	71.73	65.74	95.84	84.54	98.99	87.18	53.46	93.71	84.91	75.91	82.19	41.48	93.42	95.62	66.55	65.89	69.44	83.41	78.42	43.33	76.79	99.95	67.78	55.99	84.71	81.17	91.71	75.52
WKNNI	84.85	98.01	90.50	76.26	94.09	63.92	97.63	97.18	95.31	91.95	70.76	88.92	90.26	86.43	88.32	100.00	71.73	65.74	95.84	84.54	98.97	87.20	53.80	93.57	85.06	75.91	81.11	41.83	93.42	96.08	66.73	65.89	69.44	81.78	78.42	43.33	76.96	100.00	67.78	57.58	82.76	81.79	91.75	75.48
KMI	84.78	98.09	90.29	76.26	93.93	63.89	97.63	97.18	95.18	91.95	70.76	89.01	90.07	86.43	87.75	100.00	71.73	72.82	96.02	84.96	98.87	87.50	53.46	93.85	84.77	75.91	80.70	42.44	93.42	96.08	66.36	65.89	68.89	84.22	78.42	43.33	88.17	100.00	67.78	53.74	86.68	81.80	91.79	75.70
FKMI	84.67	98.04	90.21	76.26	94.30	63.89	97.63	97.18	95.61	91.95	69.65	88.86	90.07	86.43	88.96	100.00	71.73	71.30	96.02	85.06	98.72	87.45	54.14	94.57	84.62	75.91	80.93	40.28	93.42	95.85	67.31	65.89	69.44	84.48	77.98	43.33	80.13	100.00	67.78	59.07	86.70	82.84	91.71	76.40
SVMII	84.64	98.00	90.52	76.26	94.63	65.59	97.56	97.24	94.87	91.95	70.76	88.34	90.12	86.43	96.20	100.00	71.73	69.03	96.05	85.18	98.98	87.81	53.80	93.71	83.76	75.20	76.95	33.15	93.42	92.41	59.53	64.64	69.44	80.41	51.46	56.67	79.42	100.00	67.78	62.09	86.02	82.73	91.55	74.01
EM	84.78	98.41	90.37	75.18	94.09	45.79	97.63	94.67	94.21	88.60	70.64	87.56	73.94	89.91	87.03	100.00	71.73	65.32	95.77	84.48	98.68	85.18	55.77	93.71	84.19	74.84	76.95	32.42	93.42	91.72	59.89	64.64	69.44	82.86	46.70	56.67	80.00	67.78	61.32	86.67	81.38	91.08	73.88	
SVDI	84.08	98.22	90.95	75.91	94.09	48.51	97.56	96.57	93.87	88.60	70.64	88.10	76.65	89.91	88.31	100.00	71.73	64.74	95.73	84.51	98.57	85.58	43.23	45.64	51.24	74.16	87.16	20.89	49.51	50.56	2.50	57.78	58.72	18.14	22.50	76.13	50.84	70.00	37.14	3.26	50.78	85.60	48.19	
BPCA	84.89	97.85	89.49	75.99	94.36	63.06	97.56	97.41	95.10	91.95	70.84	89.70	89.97	86.43	87.10	100.00	71.73	67.59	95.91	84.83	98.95	87.18	53.14	93.71	84.77	74.17	82.23	39.37	93.42	96.54	66.97	65.89	69.44	82.59	76.21	43.33	82.67	100.00	68.89	53.02	81.47	82.63	92.42	75.38
LLSI	84.56	97.82	90.28	75.99	94.14	64.63	97.63	97.98	94.78	91.95	70.76	89.73	89.87	86.43	93.91	100.00	71.36	68.77	95.62	85.04	98.91	87.63	54.12	94.14	84.62	75.91	80.74	42.44	93.42	96.08	66.34	65.89	69.44	82.60	78.42	43.33	80.04	100.00	67.78	57.53	86.68	81.90	90.81	75.82
MC	83.68	97.73	90.05	76.26	94.04	63.89	97.63	97.18	95.31	91.95	70.76	88.77	90.07	86.43	89.60	100.00	71.73	68.52	96.02	85.00	98.69	87.30	53.14	94.86	84.91	75.91	78.91	44.06	93.42	96.54	66.35	61.79	69.44	59.50	72.47	43.33	86.25	100.00	67.78	58.41	83.04	81.90	90.81	75.82
CMC	84.49	97.74	90.29	76.26	93.44	71.75	97.56	98.03	94.99	92.39	70.76	98.85	90.07	87.12	96.91	100.00	71.73	70.04	95.91	85.76	99.02	88.72	83.31	98.06	90.02	76.38	93.44	59.98	97.63	97.16	94.49	91.95	70.76	86.47	90.12	86.43	85.95	100.00	71.73	59.86	94.90	84.54	97.94	86.24
DNI	83.31	98.06	90.02	76.38	93.44	59.98	97.63	97.16	94.49	91.95	70.76	86.47	90.12	86.43	85.95	100.00	71.73	59.86	94.90	84.54	97.94	86.24																						

Table 5: Results for C4.5 classifier

Imp. Meth.	Training																	Test																
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean												
IM	52.79	96.05	80.95	67.51	74.70	24.93	92.25	92.25	70.88	77.78	72.56	100.00	43.33	46.92	82.79	38.20	50.44	59.13	86.63	74.97	91.32	70.30												
EC	53.32	95.76	82.29	64.18	71.87	33.33	92.45	92.83	70.57	76.91	45.66	76.63	76.55	43.07	82.65	48.20	49.63	57.66	87.88	57.41	93.69	69.17												
KNNI	52.81	95.49	80.05	66.16	75.55	29.63	92.45	92.14	71.42	76.33	73.48	79.56	75.76	43.07	78.71	48.20	49.01	53.29	87.98	73.27	92.37	70.80												
WKNNI	52.81	95.49	80.05	66.16	75.55	29.63	92.45	92.14	71.40	76.33	73.50	79.56	75.76	43.07	78.71	48.20	49.01	53.37	87.98	73.27	92.36	70.80												
KMI	52.62	95.64	80.15	66.32	75.82	29.63	92.45	93.29	71.27	77.49	73.97	77.45	73.65	43.07	79.07	48.20	49.01	54.46	88.02	73.33	92.27	70.82												
FKMI	53.39	95.60	79.78	66.32	75.87	29.63	92.45	93.27	71.36	76.33	73.72	78.87	73.65	43.07	78.93	48.20	49.01	56.48	88.02	73.74	92.27	70.95												
SVMi	52.84	95.82	80.46	66.32	75.22	32.03	92.42	91.99	72.14	76.62	75.41	95.50	73.80	43.07	82.51	48.20	49.14	58.25	88.06	75.64	92.47	72.28												
EM	53.17	95.84	80.34	67.01	80.05	16.00	92.42	89.27	68.40	79.69	75.02	76.99	47.15	36.47	77.42	48.20	49.01	54.55	88.02	74.18	92.10	68.63												
SVDI	52.70	95.10	80.89	66.78	80.16	21.38	92.42	88.74	68.12	79.69	73.17	76.42	50.20	37.51	78.42	48.20	49.75	51.52	87.73	74.32	91.80	68.81												
BPCA	52.88	95.39	79.02	64.96	75.33	30.13	92.42	93.04	71.53	77.79	73.79	79.38	74.24	43.07	78.93	48.20	49.01	58.42	87.66	73.40	92.22	70.99												
LLSI	53.25	95.74	79.97	64.96	75.39	29.08	92.42	93.50	72.03	75.59	74.67	79.11	75.22	43.07	80.14	48.20	49.88	59.01	87.69	74.91	92.52	71.25												
MC	52.84	95.84	80.42	66.32	76.47	29.63	92.45	93.27	70.49	76.33	73.70	76.39	73.65	43.07	78.64	48.20	49.01	56.82	88.02	73.68	92.16	70.83												
CMC	53.28	95.84	80.02	66.32	75.55	35.27	92.45	93.78	72.14	76.76	75.35	91.52	78.12	43.07	80.58	48.20	49.01	58.50	88.09	75.84	92.60	72.49												
DNI	52.84	95.84	80.73	65.11	75.66	33.93	92.45	92.37	68.06	79.83	75.08	77.57	73.65	43.07	80.00	48.20	49.88	47.06	88.06	75.65	91.96	70.81												
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean												
IM	53.51	95.90	81.02	68.21	76.44	23.13	92.71	92.11	71.87	82.86	72.47	40.00	20.00	51.67	81.65	38.19	50.69	58.93	86.81	75.51	91.50	66.91												
EC	52.15	96.14	83.16	63.27	71.76	32.62	92.86	93.30	69.41	83.21	46.85	80.71	74.45	43.33	81.96	48.20	50.00	57.75	87.95	56.51	93.69	69.49												
KNNI	53.10	95.42	80.13	66.76	77.02	30.94	92.86	92.16	72.82	80.54	73.33	81.53	78.79	43.33	82.00	48.20	48.89	53.96	87.94	72.84	92.62	71.68												
WKNNI	53.10	95.42	80.13	66.76	77.02	30.94	92.86	92.16	72.82	80.54	73.33	81.53	78.79	43.33	82.00	48.20	48.89	53.96	87.94	72.84	92.62	71.68												
KMI	52.76	95.71	80.27	67.09	76.50	29.82	92.86	93.31	72.44	80.54	72.96	79.59	74.80	43.33	78.79	48.20	48.89	51.43	88.27	73.05	92.34	71.09												
FKMI	53.76	95.56	79.98	67.09	75.59	30.73	92.86	93.54	72.63	81.96	73.52	81.78	74.80	43.33	80.00	48.20	48.89	56.10	88.27	73.88	92.31	71.66												
SVMi	53.43	95.99	80.85	66.76	76.48	32.02	92.86	92.62	74.15	80.36	71.48	72.75	75.24	43.33	80.13	48.20	48.89	59.01	88.27	74.82	92.62	71.44												
EM	53.10	95.42	80.85	67.43	80.46	16.52	92.86	88.95	67.88	83.21	73.52	77.12	35.10	40.83	78.13	48.20	48.89	56.81	81.74	74.30	91.91	68.25												
SVDI	53.10	94.99	80.85	67.45	81.48	21.27	92.86	89.20	66.93	83.21	72.41	77.93	30.67	40.83	75.50	48.20	50.00	52.31	82.72	74.72	91.83	68.02												
BPCA	40.30	46.65	54.57	55.97	68.96	24.55	20.06	49.51	47.33	6.61	52.22	53.57	18.56	43.33	78.75	48.20	56.67	56.81	3.26	51.61	87.96	44.93												
LLSI	53.43	95.71	79.83	64.32	76.60	30.55	92.86	93.07	72.43	80.54	70.56	79.88	74.37	43.33	80.67	48.20	48.89	60.55	85.98	74.09	92.35	71.40												
MC	52.76	96.13	80.27	67.09	76.48	30.73	92.86	93.54	70.73	81.96	72.78	80.68	74.80	43.33	80.71	48.20	48.89	54.62	88.27	73.88	92.19	71.47												
CMC	53.10	95.99	79.98	66.76	76.98	34.76	92.86	93.76	73.97	77.86	72.22	85.87	77.47	43.33	80.67	48.20	48.89	60.60	88.27	75.66	92.74	72.38												
DNI	52.76	96.13	80.85	65.35	77.43	34.06	92.86	92.15	68.45	83.21	75.74	78.00	75.24	43.33	80.79	48.20	50.00	46.32	88.27	75.86	92.11	71.29												

Table 6: Results for 1-NN classifier

Imp. Meth.	Training																	Test																										
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	65.96	97.02	88.00	75.53	100.00	90.31	100.00	100.00	93.86	100.00	78.97	100.00	100.00	100.00	100.00	100.00	73.44	76.76	96.66	83.12	94.87	91.17	58.28	96.77	87.08	70.54	65.03	31.89	91.89	92.98	72.51	86.86	71.95	40.00	10.00	55.00	86.34	100.00	67.92	52.88	83.69	82.93	92.97	71.31
EC	66.96	97.14	86.78	73.70	90.41	64.70	100.00	97.98	91.19	100.00	77.74	85.66	100.00	100.00	91.83	100.00	72.59	72.31	97.10	83.21	95.03	87.83	59.77	97.14	85.65	71.39	61.26	41.07	92.05	95.39	70.94	83.04	72.96	80.43	76.64	46.67	85.83	100.00	68.89	51.65	82.44	82.94	93.49	76.17
KNNI	65.90	96.74	87.63	74.05	95.19	64.51	100.00	97.21	90.79	100.00	85.75	100.00	100.00	100.00	90.97	100.00	72.72	69.70	97.10	82.87	95.11	87.88	59.42	96.42	85.50	70.71	55.24	39.85	91.78	95.16	74.16	85.54	75.19	80.41	60.95	40.00	83.96	99.61	68.89	49.95	82.78	82.53	93.45	74.83
WKNNI	65.90	96.74	87.63	74.05	95.13	64.51	100.00	97.21	90.79	100.00	85.81	100.00	100.00	100.00	90.97	100.00	72.72	69.70	97.10	82.87	95.12	87.88	59.42	96.42	85.50	70.71	55.24	39.85	91.78	95.16	74.54	85.54	74.81	80.41	60.95	40.00	83.96	99.61	68.89	49.95	82.78	82.53	93.45	74.83
KMI	65.57	96.76	87.39	73.78	96.60	64.58	100.00	97.49	90.60	100.00	79.22	86.35	100.00	100.00	89.54	100.00	72.72	70.12	97.10	82.74	95.10	87.89	59.10	96.42	85.50	71.05	60.18	41.53	91.79	95.61	74.73	86.79	75.19	80.17	64.49	33.33	85.17	100.00	68.89	56.10	82.76	82.21	93.37	75.47
FKMI	65.75	96.74	87.58	73.78	96.43	64.51	100.00	97.52	90.37	100.00	79.94	85.96	100.00	100.00	90.61	100.00	72.72	70.12	97.10	82.52	94.90	87.93	59.10	96.42	85.93	71.05	55.37	41.21	91.79	95.61	73.02	86.79	74.44	81.79	64.94	33.33	85.12	100.00	68.89	53.85	83.06	82.21	93.69	75.13
SVM1	65.75	96.85	86.84	73.78	96.59	69.52	100.00	97.16	91.36	100.00	78.85	100.00	100.00	100.00	95.12	100.00	72.72	72.05	97.10	83.72	95.11	89.17	59.10	96.71	85.79	71.05	58.77	33.17	91.79	95.61	74.55	84.46	74.44	81.79	64.94	33.33	85.71	100.00	68.89	54.62	83.39	83.15	93.88	74.87
EM	65.75	96.76	87.60	74.09	100.00	54.25	100.00	93.93	90.11	100.00	79.34	86.38	100.00	100.00	90.32	100.00	72.72	71.46	97.10	82.38	95.05	86.86	58.76	96.42	86.23	70.33	61.94	29.58	91.79	95.61	75.02	86.79	74.44	81.79	64.94	33.33	85.12	100.00	68.89	56.70	82.72	81.80	93.69	71.47
SVD1	65.82	96.66	87.99	74.13	99.89	53.17	100.00	93.73	88.68	100.00	78.85	85.54	100.00	100.00	91.97	99.54	73.09	69.87	97.10	82.30	94.81	86.82	59.42	95.85	86.08	69.97	65.41	28.86	91.24	91.49	68.51	76.25	75.37	78.52	8.74	44.17	82.00	98.84	68.89	56.70	82.72	81.80	93.69	71.47
BPCA	65.75	96.76	86.97	73.62	96.00	63.20	100.00	97.44	90.11	100.00	78.66	86.90	100.00	100.00	90.97	100.00	72.72	68.43	97.10	82.66	95.10	87.73	59.42	95.85	86.08	69.97	65.41	28.86	91.24	91.49	68.51	76.25	75.37	78.52	8.74	44.17	82.00	98.84	68.89	56.70	82.72	81.80	93.69	71.47
LLSI	65.75	96.88	87.68	73.62	99.19	64.05	100.00	99.10	89.84	100.00	79.36	84.78	100.00	100.00	92.97	100.00	72.22	72.14	97.10	82.97	95.16	88.23	59.10	96.71	85.79	71.05	58.77	33.17	91.79	95.61	73.02	86.79	74.44	81.79	64.94	33.33	85.12	100.00	68.89	53.85	83.06	82.21	93.69	75.13
MC	65.93	96.96	87.50	73.78	94.10	64.51	100.00	97.52	90.37	100.00	79.03	86.02	100.00	100.00	88.89	100.00	72.72	73.49	97.10	82.54	95.07	87.88	59.10	96.71	85.79	71.05	58.77	33.17	91.79	95.61	73.02	86.79	74.44	81.79	64.94	33.33	85.12	100.00	68.89	53.85	83.06	82.21	93.69	75.13
CMC	65.82	96.85	87.53	73.78	97.08	73.92	100.00	98.75	91.66	100.00	80.19	95.62	100.00	100.00	94.62	100.00	72.72	73.57	97.10	83.93	95.16	89.44	58.76	96.85	85.93	71.05	58.93	38.12	91.23	94.91	76.64	83.04	74.07	82.63	64.55	46.67	86.42	100.00	68.89	56.87	84.69	83.84	93.84	76.08
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 7: Results for LOG classifier

Training																						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	47.70	95.43	78.42	59.44	47.60	19.63	77.49	89.32	59.78	68.52	64.27	100.00	0.00	44.38	79.69	88.64	50.59	61.28	52.63	75.99	85.16	64.09
EC	49.87	94.33	77.71	65.31	45.18	21.03	78.93	89.50	47.63	64.29	62.04	74.03	31.40	47.56	81.58	88.18	53.70	53.71	51.39	71.90	93.69	63.95
KNNI	48.33	94.33	78.36	60.68	39.79	20.07	78.02	89.86	59.97	64.91	58.19	73.10	30.42	32.59	77.57	91.09	50.74	49.60	49.58	72.79	88.91	62.33
WKNNI	50.05	94.98	74.55	59.94	43.41	18.00	78.27	89.50	56.85	64.91	59.65	71.37	32.50	42.00	76.28	91.91	47.90	46.72	49.40	72.88	84.81	62.19
KMI	44.99	92.96	78.31	56.72	46.22	15.80	76.29	87.17	54.59	62.42	57.49	69.62	39.44	42.07	73.69	90.86	51.48	56.99	45.42	73.70	81.96	61.82
FKMI	50.64	95.37	79.68	59.37	43.68	16.90	75.46	89.58	58.09	63.76	60.70	76.36	36.52	50.36	78.85	90.48	55.93	52.28	48.50	75.86	88.58	64.14
SVMl	44.45	94.12	81.84	57.54	37.83	18.46	78.05	88.89	60.95	66.16	62.22	100.00	0.00	46.51	75.26	89.87	51.17	54.96	53.60	74.69	87.79	63.07
EM	48.37	93.67	73.57	63.64	53.38	10.22	76.62	80.39	48.56	59.53	60.78	77.51	19.91	39.20	71.68	48.20	53.09	53.03	44.26	70.63	87.79	58.76
SVDI	52.62	95.14	80.39	65.00	55.23	11.78	74.56	83.49	52.62	66.95	59.92	72.19	24.98	34.03	76.13	48.20	48.40	54.46	45.71	70.70	87.47	60.00
BPCA	48.92	93.36	78.12	65.22	40.11	14.98	75.31	91.22	61.09	61.69	57.51	77.02	31.96	41.67	77.57	48.20	49.75	52.11	45.03	70.07	83.12	60.19
LLSI	49.39	95.20	76.54	64.49	48.02	16.64	78.39	89.96	60.06	62.72	63.31	73.64	30.54	36.82	76.13	48.20	55.19	55.05	50.42	68.04	85.06	61.13
MC	52.40	94.21	78.07	70.43	44.96	17.08	77.24	89.63	58.79	62.13	59.67	78.05	30.34	31.60	76.71	90.41	54.07	57.15	46.91	70.70	89.38	63.33
CMC	49.36	95.06	79.67	56.45	41.71	19.60	77.11	90.40	57.04	68.56	62.78	88.19	37.22	39.89	80.21	90.70	51.98	57.67	51.50	74.62	89.98	64.75
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Test																						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	47.12	95.76	77.84	54.97	50.23	22.11	79.83	88.80	57.06	80.00	65.54	40.00	0.00	56.67	74.79	38.19	59.72	62.60	55.30	76.90	84.22	60.36
EC	47.15	94.28	78.38	65.72	52.53	22.91	81.43	90.77	47.18	70.18	44.07	77.16	34.41	50.00	81.88	48.20	57.78	48.41	57.67	71.48	93.69	62.63
KNNI	48.18	94.42	77.66	62.93	42.17	17.92	75.89	88.71	64.65	75.36	59.26	73.38	35.89	35.00	78.75	48.20	55.56	45.60	54.11	72.73	89.62	61.71
WKNNI	51.77	95.42	73.02	59.07	44.88	16.82	77.26	89.14	60.09	70.54	61.30	65.50	32.77	33.33	74.75	48.20	50.00	54.45	54.35	73.05	84.29	60.48
KMI	46.56	92.42	77.51	56.60	51.51	18.45	73.99	86.83	55.70	63.39	57.22	70.68	41.15	35.83	71.67	48.20	50.00	57.58	50.45	75.14	82.64	60.17
FKMI	53.12	94.85	79.12	56.13	48.75	17.08	78.64	90.31	60.30	76.61	57.96	76.32	38.58	50.00	77.54	48.20	54.44	52.36	52.47	77.02	88.52	63.25
SVMl	50.10	92.71	81.72	61.29	39.38	19.60	80.62	89.60	60.49	73.57	59.63	63.05	20.79	53.33	75.54	48.20	44.44	56.04	53.40	74.72	87.53	61.23
EM	33.00	45.64	53.99	58.37	39.29	11.46	18.39	51.58	52.28	7.68	51.67	50.02	4.47	56.67	68.96	10.04	44.44	41.54	3.58	69.61	88.08	40.99
SVDI	41.24	46.35	56.75	66.35	36.90	12.77	18.42	51.34	47.33	1.25	45.56	51.94	7.98	58.33	81.96	10.04	52.22	35.66	3.26	72.22	87.29	42.15
BPCA	49.45	81.54	80.69	61.98	33.94	15.19	73.68	96.31	88.04	59.64	61.48	71.98	28.40	65.83	92.13	10.04	33.33	85.55	80.46	49.21	80.15	61.86
LLSI	48.52	95.00	74.01	59.46	53.69	19.10	79.74	90.29	60.46	73.93	62.04	71.98	32.27	30.83	74.83	48.20	50.00	59.01	51.43	69.94	85.56	61.44
MC	52.45	94.28	76.34	68.15	41.51	18.32	76.97	91.92	58.03	71.25	65.93	77.99	34.35	30.83	76.08	48.20	46.67	52.31	51.81	71.38	89.07	61.61
CMC	50.81	95.57	78.82	53.69	42.61	18.24	77.86	89.37	57.04	68.93	59.81	86.15	37.65	40.83	76.21	48.20	54.44	58.52	55.35	75.96	90.10	62.67
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 8: Results for LVQ classifier

Imp. Meth.	Training														Test																													
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	84.74	99.51	96.15	92.17	1.89	21.22	84.74	100.00	50.26	5.54	35.74	60.00	0.00	29.63	100.00	38.20	93.49	50.58	77.36	86.16	96.86	62.11	50.10	95.46	79.61	63.56	1.86	21.49	50.10	94.32	49.99	4.29	35.38	30.00	0.00	28.33	81.34	38.19	54.31	50.80	66.40	82.06	92.69	50.97
EC	54.13	99.40	60.22	91.41	1.46	48.28	54.13	99.59	52.28	75.15	42.22	63.05	21.23	31.67	79.36	48.20	57.78	37.91	61.30	82.42	93.69	55.84	54.12	94.14	55.72	62.63	1.46	35.00	54.12	94.92	52.28	49.46	42.22	63.05	21.23	31.67	79.37	48.20	57.78	37.91	61.30	82.42	93.69	55.84
KNNI	82.88	99.60	96.05	92.00	96.09	41.77	82.88	99.46	69.06	75.13	42.22	98.94	21.24	92.86	100.00	48.20	92.96	92.52	69.23	85.91	96.90	79.79	51.10	94.71	81.58	65.99	68.08	29.95	51.10	93.30	61.86	53.39	42.22	66.53	21.23	35.00	72.88	48.20	53.33	50.88	58.06	82.42	93.57	60.73
WKNNI	83.28	99.52	96.55	93.28	96.91	44.18	83.28	99.41	69.42	74.26	42.22	99.76	21.24	92.86	100.00	48.20	93.58	92.69	69.95	85.35	97.57	80.17	52.49	95.14	83.61	61.24	68.73	35.06	52.49	94.46	59.76	55.00	42.22	67.30	21.23	28.33	81.38	48.20	53.33	51.65	62.31	82.32	92.94	61.39
KMI	82.99	99.40	95.71	90.29	97.62	40.05	82.99	99.59	69.48	77.49	42.22	99.70	21.24	92.86	100.00	48.20	93.58	93.02	70.31	85.52	97.07	79.97	50.76	94.42	82.02	68.54	65.13	32.11	50.76	95.62	62.05	57.14	42.22	75.52	21.23	40.83	74.67	48.20	56.67	53.74	60.05	81.27	92.98	62.19
FKMI	84.97	99.62	96.24	92.43	97.07	40.45	84.97	99.64	69.08	77.64	42.22	98.55	21.24	92.86	100.00	48.20	93.33	93.02	64.49	85.25	98.38	79.98	50.14	93.71	83.47	64.75	65.92	30.10	50.14	94.46	61.67	51.79	42.22	78.51	21.23	52.50	82.58	48.20	51.11	48.46	59.97	83.25	92.94	62.24
SVMII	84.19	99.48	96.40	91.96	96.86	42.25	84.19	99.80	69.95	76.32	42.22	98.64	21.24	92.86	100.00	48.20	92.96	92.94	67.35	86.33	97.61	80.08	55.41	95.14	82.45	65.00	71.58	33.00	55.41	94.22	62.63	51.96	42.22	61.00	21.23	37.50	83.79	48.20	53.33	52.31	59.04	83.25	92.78	62.00
EM	84.38	99.73	95.92	93.04	97.29	39.19	84.38	96.95	74.86	77.05	42.22	95.44	21.24	92.51	100.00	48.20	93.21	37.88	3.26	85.59	98.33	74.32	52.80	94.85	81.44	63.63	79.50	29.36	52.80	85.72	60.12	49.29	42.22	77.67	21.23	31.67	77.54	48.20	51.11	37.91	3.26	83.15	92.26	57.89
SVDI	83.21	99.57	96.26	91.65	98.43	36.64	83.21	98.23	74.01	79.68	42.22	96.10	21.24	92.86	100.00	48.20	93.21	37.88	3.26	85.65	97.84	74.26	38.96	94.64	54.15	87.10	88.50	41.99	38.96	50.20	51.13	6.43	42.22	73.08	21.23	45.00	77.88	48.20	58.89	37.91	3.26	82.84	92.23	58.90
BPCA	82.77	99.67	96.02	93.16	97.13	43.90	82.77	99.77	68.70	77.93	42.22	98.79	21.24	92.86	99.93	48.20	93.58	92.26	67.85	85.27	96.68	80.03	51.43	94.42	82.88	65.39	69.18	29.84	51.43	94.24	58.80	60.89	42.22	70.05	21.23	31.67	82.67	48.20	55.56	52.42	60.05	82.84	92.23	61.82
LLSI	84.71	99.63	97.06	92.03	95.29	44.92	84.71	100.00	69.42	76.02	42.22	99.34	21.24	92.86	100.00	48.20	92.96	92.94	69.88	85.52	98.07	80.34	50.43	93.85	80.71	65.81	62.23	35.90	50.43	93.34	61.10	62.50	42.22	70.13	21.23	25.83	77.50	48.20	54.44	53.13	57.09	83.56	93.29	61.09
MC	85.22	99.62	96.13	91.92	96.58	48.97	85.22	99.64	69.97	74.27	42.22	99.67	21.24	92.86	100.00	48.20	93.09	92.52	63.22	85.56	96.33	80.11	53.14	79.55	66.13	60.50	66.13	32.40	53.14	94.70	62.63	53.57	42.22	83.44	21.23	45.83	79.29	48.20	50.00	46.98	58.72	83.36	93.09	62.58
CMC	83.65	99.73	96.45	91.80	96.53	48.96	83.65	99.80	69.84	74.70	42.22	99.91	21.24	92.86	100.00	48.20	93.21	93.36	65.61	86.06	97.42	80.25	53.14	94.71	79.55	66.13	71.88	32.40	53.14	94.70	62.63	53.57	42.22	83.44	21.23	45.83	79.29	48.20	50.00	46.98	58.72	83.36	93.09	62.58
DNI	82.91	99.52	96.53	91.69	96.37	40.73	82.91	99.59	69.38	77.20	42.22	99.46	21.24	92.86	100.00	48.20	93.46	93.02	69.37	85.80	96.39	79.95	48.14	94.57	84.34	60.50	65.89	31.35	48.14	93.09	60.12	51.79	42.22	80.17	21.23	35.00	76.13	48.20	50.00	43.85	61.31	82.52	93.29	60.56

Table 9: Results for MLP classifier

Imp. Meth.	Training														Test													
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean						
IM	76.28	97.66	89.37	76.82	89.86	62.12	99.35	91.32	92.36	95.46	88.52	100.00	100.00	93.00	97.23	97.45	74.71	94.90	92.65	83.49	74.79	88.93						
EC	75.87	97.42	89.02	75.41	87.37	56.02	99.42	90.35	91.38	93.71	92.53	83.94	79.89	87.50	93.41	95.97	74.20	94.19	93.16	83.62	74.89	86.16						
KNNI	75.87	97.42	88.99	75.29	88.24	53.89	99.42	90.50	91.99	94.44	91.58	85.75	81.17	87.16	91.04	95.55	74.32	93.35	93.16	82.65	73.65	85.97						
WKNNI	75.87	97.42	88.99	75.29	88.24	53.89	99.42	90.50	91.99	94.44	91.58	85.75	81.17	87.16	91.04	95.55	74.32	93.35	93.16	82.65	73.66	85.97						
KMI	75.87	97.42	89.03	75.29	88.13	53.79	99.42	90.35	92.02	94.44	93.56	85.72	81.32	86.81	91.54	95.57	74.32	93.52	92.69	82.70	73.17	86.03						
FKMI	75.87	97.42	89.03	75.29	88.13	53.79	99.42	90.27	91.99	94.44	93.56	85.60	81.32	86.81	91.54	95.57	74.32	93.77	92.69	82.80	74.54	86.10						
SVMi	75.80	97.42	89.10	75.29	88.45	57.86	99.42	90.71	92.52	94.44	92.43	91.27	81.81	87.50	94.12	95.55	74.32	94.36	93.30	84.24	76.19	86.96						
EM	62.38	97.12	86.63	75.41	76.31	40.62	99.42	88.07	70.05	94.88	76.32	77.05	55.26	90.62	87.31	93.44	74.32	77.95	92.40	83.17	75.91	79.74						
SVDI	62.49	96.92	86.76	75.25	76.80	44.08	99.39	87.74	69.29	94.58	76.38	76.06	56.49	90.96	88.89	93.50	73.95	76.52	92.40	83.20	75.90	79.88						
BPCA	62.49	97.39	86.65	75.60	75.55	54.61	99.42	90.53	84.41	94.30	88.17	79.77	82.40	87.50	88.75	95.55	74.32	79.46	93.34	83.62	73.93	83.23						
LLSI	62.41	97.36	87.08	75.60	75.66	56.18	99.42	91.09	84.73	93.86	89.28	80.16	82.94	87.50	90.11	96.04	73.95	82.15	93.67	83.84	74.02	83.67						
MC	75.87	97.42	89.03	75.29	88.13	53.79	99.42	90.27	91.99	94.44	93.56	85.60	81.32	86.81	91.54	95.57	74.32	93.77	92.69	82.83	75.03	86.13						
CMC	75.83	97.42	89.05	75.29	89.32	65.86	99.42	91.76	92.84	94.00	93.00	97.01	83.43	87.84	95.48	95.57	74.32	94.70	93.01	84.53	76.41	87.91						
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean						
IM	54.91	97.65	86.03	74.40	72.24	48.18	97.77	90.87	76.69	79.00	73.87	40.00	20.00	66.67	82.65	97.38	69.03	65.04	89.41	82.90	74.44	73.29						
EC	55.46	97.43	85.06	72.38	68.86	46.05	97.80	89.59	76.64	85.54	78.70	77.17	72.15	52.50	85.08	95.88	67.78	56.92	90.53	82.52	74.19	76.58						
KNNI	55.46	97.43	85.20	73.43	69.35	46.54	97.80	89.83	77.22	84.29	79.63	79.08	72.61	49.17	81.25	95.52	67.78	55.38	89.87	81.69	72.93	76.26						
WKNNI	55.46	97.43	85.20	73.43	69.35	46.54	97.80	89.83	77.22	84.29	79.63	79.08	72.61	49.17	81.25	95.52	67.78	55.38	89.87	81.69	72.93	76.26						
KMI	55.46	97.43	85.35	73.43	69.28	46.63	97.80	89.83	77.03	84.29	79.07	79.09	70.87	49.17	80.63	95.48	67.78	56.87	90.20	81.59	71.79	76.15						
FKMI	55.46	97.43	85.35	73.43	68.39	46.02	97.80	89.84	77.03	84.29	79.07	80.45	72.61	49.17	80.63	95.48	67.78	57.64	90.20	81.79	73.56	76.35						
SVMi	55.80	97.43	85.49	73.43	69.24	46.34	97.80	90.53	77.79	85.54	77.59	75.00	73.06	52.50	86.42	95.52	67.78	60.00	90.53	82.84	75.65	76.97						
EM	57.43	97.14	84.92	72.73	71.74	33.18	97.80	88.03	61.22	80.36	67.78	72.52	16.44	58.33	81.96	93.17	67.78	65.66	87.56	82.42	74.59	72.04						
SVDI	58.76	97.14	84.92	73.09	71.74	33.41	97.80	87.80	62.36	81.79	67.96	72.23	18.22	55.00	82.67	93.18	67.78	64.18	87.57	82.42	74.63	72.13						
BPCA	41.92	44.21	49.94	68.96	76.93	45.91	19.50	49.28	48.85	3.75	56.11	55.21	19.43	6.67	70.96	51.16	68.89	37.09	3.26	50.98	60.54	44.26						
LLSI	57.43	97.43	85.04	72.73	64.79	48.44	97.80	90.52	76.64	84.29	75.00	77.17	72.65	52.50	85.75	96.01	67.78	59.89	87.27	83.15	73.76	76.51						
MC	55.46	97.43	85.35	73.43	68.39	46.02	97.80	89.84	77.03	84.29	79.07	80.45	72.61	49.17	80.63	95.48	67.78	57.64	90.20	81.79	72.93	76.32						
CMC	55.46	97.43	85.35	73.43	69.87	48.32	97.80	91.21	78.54	85.54	79.26	87.24	72.63	52.50	86.46	95.48	67.78	56.15	90.53	83.56	75.53	77.62						
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

Table 10: Results for NB classifier

Imp. Meth.	Training														Test																													
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HBP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HBP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	58.06	75.18	86.91	77.26	96.92	85.69	99.38	90.33	72.73	100.00	79.30	100.00	86.67	86.35	92.79	84.76	50.71	85.94	93.73	82.53	94.34	84.74	57.59	74.82	87.65	74.34	76.40	41.81	97.22	90.04	65.26	85.71	72.63	40.00	20.00	55.00	84.77	45.00	55.66	90.93	82.53	93.01	70.24	
EC	59.70	96.53	85.32	76.26	99.30	56.92	99.33	90.17	89.21	100.00	74.55	84.78	100.00	89.22	91.25	89.80	46.05	61.53	97.83	83.04	94.20	84.05	56.77	95.85	84.33	71.02	82.19	32.48	97.27	90.05	65.81	84.11	69.07	83.15	78.89	37.50	84.54	89.82	46.67	47.09	90.55	82.42	93.76	74.45
KNNI	58.27	73.87	86.34	75.91	97.51	51.91	99.30	90.60	59.32	100.00	74.12	83.57	100.00	89.57	87.82	89.82	47.04	51.18	97.83	81.89	94.84	80.51	57.06	73.53	86.08	71.38	66.01	29.07	97.27	90.06	52.12	88.04	66.48	82.33	78.85	40.00	82.58	89.82	40.00	47.58	90.23	81.59	94.12	71.63
WKNNI	58.13	73.87	86.32	75.91	97.62	51.91	99.30	90.60	58.70	100.00	74.12	83.45	100.00	89.57	87.74	89.82	47.04	51.76	97.83	81.89	94.87	80.50	57.72	73.53	86.08	71.38	64.91	29.20	97.27	90.06	52.29	88.04	65.93	82.33	78.89	40.83	84.54	89.81	40.00	46.87	89.90	81.48	93.61	71.65
KMI	58.38	73.87	86.34	75.91	98.00	51.42	99.30	90.12	58.10	100.00	72.57	85.20	100.00	89.57	87.67	89.81	47.04	55.07	97.79	81.69	94.89	80.61	55.76	73.53	86.08	71.38	65.04	29.80	97.27	90.30	56.88	88.04	65.93	82.61	78.44	40.83	83.92	89.81	40.00	45.16	89.90	81.38	93.84	71.71
FKMI	59.45	73.87	86.37	75.91	98.37	51.42	99.30	90.04	64.00	100.00	72.74	84.90	100.00	89.57	88.03	89.81	47.04	53.19	97.79	81.59	94.71	80.86	58.05	73.53	85.79	71.38	67.38	31.83	97.27	90.99	56.48	88.04	62.78	83.96	78.89	43.33	82.00	89.82	40.00	44.56	90.23	82.84	94.32	72.07
SVMi	56.91	73.87	86.36	75.91	97.29	57.98	99.33	90.73	63.60	100.00	68.89	85.45	100.00	89.57	90.32	89.82	47.04	57.81	97.83	83.06	94.88	81.27	55.75	73.68	86.08	72.07	73.52	4.42	97.27	87.56	37.24	78.93	67.04	77.97	44.82	65.00	82.00	87.46	40.00	57.58	88.25	82.21	93.88	69.18
EM	57.94	73.88	86.37	76.50	97.40	10.79	99.30	87.97	40.73	100.00	68.77	83.54	67.16	92.35	87.74	87.42	47.04	80.72	97.90	82.46	95.03	77.19	38.92	63.66	47.32	71.73	76.16	42.80	97.27	47.67	41.42	3.75	55.56	59.00	18.12	6.67	79.37	51.80	48.89	34.89	3.26	52.44	89.42	45.34
SVDI	58.49	73.90	86.34	76.46	97.40	12.95	99.30	87.92	40.64	100.00	69.16	82.91	80.57	92.35	87.74	88.17	48.02	80.98	97.90	82.60	94.88	78.03	55.12	73.53	86.08	71.38	67.86	29.20	97.27	90.75	53.78	86.79	67.59	82.06	78.89	43.33	83.83	89.80	41.11	45.27	87.95	82.83	94.08	71.83
BPCA	58.42	73.87	85.94	76.07	98.32	52.92	99.33	90.78	57.71	100.00	71.81	84.06	100.00	89.57	88.10	89.79	47.04	58.57	97.83	82.74	94.89	80.85	57.74	73.87	86.42	75.91	97.94	51.42	99.30	90.04	60.52	88.04	65.93	82.61	78.44	40.83	84.54	89.81	40.00	47.58	89.90	81.38	93.69	71.84
LLSI	57.98	73.87	86.55	76.07	97.34	56.30	99.30	91.32	60.65	100.00	73.95	85.17	100.00	89.57	87.74	89.80	47.16	56.65	97.83	82.92	94.97	81.20	58.27	73.87	86.42	75.91	97.94	51.42	99.30	90.04	60.52	88.04	65.93	82.61	78.44	40.83	84.54	89.81	40.00	47.58	89.90	81.38	93.69	71.84
MC	58.27	73.87	86.42	75.91	97.94	51.42	99.30	90.04	60.52	100.00	72.59	84.99	100.00	89.57	87.89	89.81	47.04	58.45	97.79	81.59	94.71	80.86	58.15	73.87	86.37	75.91	97.18	71.23	99.30	91.68	66.83	100.00	73.62	91.06	100.00	89.57	88.46	89.81	47.04	57.08	97.83	83.71	94.77	82.59
CMC	59.15	73.87	86.37	75.91	97.18	71.23	99.30	91.68	66.83	100.00	73.62	91.06	100.00	89.57	88.46	89.81	47.04	57.08	97.83	83.71	94.77	82.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 11: Results for ν -SVM classifier

		Training																					
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	58.47	92.79	86.35	77.58	69.81	51.43	99.35	96.99	57.95	100.00	83.84	100.00	100.00	100.00	84.30	100.00	71.26	66.80	94.15	82.62	93.07	84.13	
EC	61.68	97.50	85.55	75.64	87.37	52.35	99.36	95.49	88.55	98.54	86.65	87.14	87.32	97.22	91.68	99.95	71.11	65.99	94.61	82.80	94.01	85.74	
KNNI	58.89	92.83	85.52	75.72	68.62	46.22	99.36	95.62	60.44	98.54	84.01	87.05	88.30	97.22	87.17	99.97	71.11	68.10	94.61	81.81	93.69	82.61	
WKNNI	58.93	92.83	85.52	75.72	68.68	46.22	99.36	95.62	60.46	98.54	84.01	87.05	88.30	97.22	87.10	99.97	71.11	68.10	94.61	81.81	93.69	82.61	
KMI	58.89	92.83	85.52	75.52	68.67	46.22	99.36	95.62	60.58	98.54	84.26	86.93	88.15	97.22	87.17	99.98	71.11	67.17	94.57	81.86	93.69	82.56	
FKMI	58.93	92.83	85.52	75.52	68.78	46.22	99.36	95.62	60.48	98.54	84.38	87.02	88.15	97.22	87.17	99.98	71.11	68.27	94.57	81.80	93.69	82.63	
SVMi	59.00	92.83	85.52	75.52	68.78	46.22	99.36	95.70	61.32	98.54	87.35	87.68	87.71	96.53	85.31	99.97	71.11	68.52	94.64	82.19	93.69	83.05	
EM	58.86	92.53	85.55	75.80	75.66	36.97	99.36	92.63	56.72	97.22	85.14	82.31	60.08	99.66	86.95	100.00	71.11	64.31	94.93	81.82	93.69	80.54	
SVDI	58.86	92.04	85.55	75.72	75.93	38.61	99.36	92.63	56.46	97.51	85.70	82.40	61.65	99.66	86.67	100.00	71.11	64.73	94.93	81.97	93.69	80.72	
BPCA	59.04	92.83	85.13	75.56	68.57	49.63	99.36	95.85	60.50	98.54	84.61	86.84	89.33	97.22	87.38	99.98	71.11	66.41	94.61	82.21	93.69	82.78	
LLSI	58.97	92.83	85.52	75.56	68.67	52.68	99.36	96.31	60.50	98.54	85.39	87.41	89.83	96.87	87.24	99.95	71.11	67.76	94.93	82.39	93.69	83.12	
MC	58.78	92.83	85.52	75.52	68.78	46.22	99.36	95.62	60.54	98.54	84.26	87.02	88.15	97.22	86.95	99.98	71.11	68.86	94.57	81.80	93.69	82.63	
CMC	59.00	92.83	85.52	75.52	68.89	61.33	99.36	96.39	61.26	98.54	84.92	94.69	89.63	96.87	87.46	99.98	71.11	69.36	94.61	82.66	93.69	83.98	
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Test																							
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	57.20	92.69	86.31	73.99	66.52	43.35	96.95	97.17	56.67	87.71	72.82	40.00	20.00	50.00	84.32	100.00	71.25	60.04	91.69	82.07	93.05	72.56	
EC	57.78	96.86	85.50	71.00	73.86	45.98	97.00	95.39	76.63	85.54	77.22	83.39	73.52	39.17	85.21	99.95	71.11	49.12	92.51	81.90	93.65	77.73	
KNNI	58.40	92.85	85.50	71.71	61.23	42.99	97.00	94.70	60.26	88.04	70.00	83.94	73.93	40.00	82.00	99.95	71.11	58.30	92.18	81.48	93.69	76.16	
WKNNI	58.40	92.85	85.50	71.71	61.23	42.99	97.00	94.70	59.88	88.04	70.00	83.39	73.93	40.00	82.00	99.95	71.11	58.30	92.18	81.48	93.69	76.11	
KMI	57.73	92.85	85.50	72.07	61.75	42.42	97.27	95.62	59.89	86.79	72.22	82.88	70.43	42.50	82.63	99.95	71.11	56.04	91.86	81.38	93.69	76.03	
FKMI	57.73	92.85	85.50	72.07	63.16	42.42	97.27	95.62	60.07	86.79	71.85	82.61	71.32	42.50	82.00	99.95	71.11	58.30	91.86	81.27	93.69	76.19	
SVMi	58.06	92.85	85.50	72.07	62.69	45.36	97.00	96.31	60.46	84.29	73.52	83.14	72.63	36.67	79.38	99.95	71.11	60.60	92.18	80.75	93.69	76.10	
EM	58.73	92.42	85.50	71.69	70.93	33.77	97.27	92.64	56.46	83.04	73.15	81.22	56.72	51.67	82.00	100.00	71.11	61.43	90.54	81.28	93.69	75.49	
SVDI	58.40	92.42	85.50	71.33	70.96	31.38	97.00	92.64	56.27	83.04	73.52	81.22	57.17	51.67	81.38	100.00	71.11	59.12	90.22	80.55	93.69	75.17	
BPCA	46.83	52.07	47.31	72.42	55.32	47.47	19.50	49.51	52.28	3.75	53.70	55.47	18.12	6.67	79.37	50.84	71.11	35.55	3.26	51.61	93.69	45.99	
LLSI	57.73	92.85	85.50	71.69	62.70	45.50	97.00	96.31	60.46	85.54	70.56	83.95	74.39	42.50	83.25	99.95	71.11	59.18	89.00	80.55	93.69	76.39	
MC	57.73	92.85	85.50	72.07	62.25	42.42	97.27	95.62	59.88	86.79	72.22	82.61	71.32	42.50	82.00	99.95	71.11	57.58	91.86	81.27	93.69	76.12	
CMC	57.73	92.85	85.50	72.07	62.69	44.13	97.00	96.31	60.84	86.79	68.52	86.98	74.43	39.17	81.38	99.95	71.11	61.32	91.22	80.96	93.69	76.41	
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 12: Results for C-SVM classifier

		Training																Mean					
Imp. Meth.		CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM		82.34	98.42	92.69	86.57	97.05	75.94	98.85	98.13	92.85	98.56	90.54	100.00	93.33	88.86	97.61	100.00	83.15	85.21	95.78	83.96	97.43	92.25
EC		50.79	98.17	90.16	87.02	96.37	68.31	99.24	97.82	92.40	98.10	83.37	93.72	96.21	89.22	93.82	100.00	79.14	71.29	95.44	96.56	96.56	88.45
KNNI		82.14	98.11	91.95	89.08	95.67	65.42	98.90	95.37	91.40	97.95	93.27	92.15	95.38	85.41	95.77	100.00	81.23	88.04	96.20	83.71	97.75	91.19
WKNNI		83.68	97.84	91.82	87.52	95.55	67.58	99.24	94.52	92.54	98.39	92.65	91.37	97.00	80.97	95.49	100.00	83.95	91.08	96.02	84.03	97.72	91.38
KMI		81.77	98.12	90.87	87.80	97.56	66.73	99.06	97.13	92.92	97.95	92.53	92.87	94.99	84.74	95.20	100.00	81.60	91.25	97.39	84.55	97.06	91.53
FKMI		82.73	98.19	92.81	82.25	95.08	65.84	99.03	97.47	92.97	97.51	93.31	93.90	95.72	84.33	93.05	100.00	83.70	89.30	96.42	84.18	97.73	91.22
SVMi		80.12	98.09	92.34	87.72	96.85	72.99	98.11	96.24	91.68	97.07	92.88	92.03	96.80	85.05	95.92	100.00	79.51	88.72	96.85	85.17	97.61	91.51
EM		82.36	98.16	91.69	85.81	97.02	32.16	98.42	93.34	90.85	97.36	91.05	90.61	79.75	91.66	94.12	100.00	81.36	83.51	96.74	84.24	97.45	88.27
SVDI		84.16	98.00	92.58	88.07	97.24	32.16	98.69	94.70	90.05	98.39	91.95	92.15	83.04	94.45	94.05	100.00	83.58	86.03	96.60	83.12	97.69	89.37
BPCA		82.91	97.66	93.07	88.31	94.74	68.34	98.42	97.36	92.61	97.22	92.33	92.76	96.76	82.64	94.04	100.00	82.47	87.45	96.27	83.86	97.52	91.27
LLSI		82.66	98.27	93.84	85.75	95.12	70.54	99.06	98.13	92.35	97.81	92.47	92.12	96.16	83.34	94.20	100.00	80.99	88.98	96.31	83.92	97.55	91.41
MC		83.50	97.89	92.28	86.83	95.39	67.10	98.87	97.64	92.67	97.80	93.19	91.85	96.31	87.14	94.98	100.00	81.48	90.66	96.64	83.79	97.73	91.61
CMC		84.08	97.93	91.89	87.34	96.59	77.49	98.96	98.69	94.00	98.40	93.29	98.64	97.25	87.49	97.13	100.00	80.49	90.66	95.44	84.29	97.63	92.75
DNI		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		Test																Mean					
Imp. Meth.		CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM		48.55	95.76	83.76	60.01	81.89	27.77	89.39	96.23	68.43	66.24	64.39	40.00	0.00	66.67	83.40	100.00	40.42	50.03	87.58	79.51	89.82	67.61
EC		35.03	95.57	80.99	60.89	79.23	31.59	89.87	94.22	67.11	73.57	71.11	80.94	74.92	43.33	77.29	100.00	38.89	57.64	85.39	76.49	89.70	71.61
KNNI		44.84	95.99	83.02	64.63	75.93	25.33	90.46	91.48	67.71	77.68	75.74	78.51	63.18	34.17	76.83	99.89	47.78	62.86	85.03	80.24	89.86	71.96
WKNNI		47.23	95.42	81.86	65.72	77.40	27.84	92.61	91.92	65.99	81.61	72.78	73.34	46.42	35.00	76.71	99.89	40.00	60.55	85.39	79.82	90.77	70.87
KMI		47.22	96.28	83.75	62.57	80.61	27.14	88.23	93.99	67.52	79.46	73.89	73.60	53.64	58.33	78.71	100.00	34.44	50.60	86.66	80.54	89.66	71.75
FKMI		43.57	96.29	80.71	65.26	75.07	26.62	91.25	95.15	66.55	74.82	74.44	75.26	60.10	51.67	78.21	100.00	44.44	57.69	86.35	80.34	91.64	72.16
SVMi		39.95	95.14	81.58	63.68	74.86	28.99	87.14	94.91	68.66	71.96	75.37	75.53	63.18	43.33	83.79	100.00	38.89	64.23	85.08	80.13	90.92	71.78
EM		43.55	96.00	80.71	62.94	73.55	10.50	90.14	89.19	59.55	73.93	69.07	74.16	7.04	51.67	80.67	99.77	33.33	63.74	85.34	78.57	89.58	67.28
SVDI		40.19	96.00	81.58	64.34	74.02	13.76	90.46	90.11	61.63	72.32	74.63	74.44	7.59	55.83	74.79	100.00	50.00	59.01	82.46	78.57	90.73	68.21
BPCA		36.62	44.07	47.76	89.17	88.65	49.15	19.23	49.51	48.47	3.75	55.56	50.29	18.12	28.33	70.38	50.84	41.11	36.37	3.26	50.98	81.37	45.86
LLSI		46.20	96.29	81.00	62.51	77.93	24.34	90.14	95.38	66.53	76.25	73.52	77.13	74.41	35.00	77.96	100.00	42.22	59.95	77.61	80.55	90.65	71.69
MC		45.27	96.00	80.71	60.34	78.54	25.43	89.05	93.78	67.13	80.18	76.67	74.95	61.44	35.00	75.54	100.00	46.67	59.89	84.73	79.93	88.83	71.43
CMC		45.22	96.00	80.42	60.83	77.58	29.10	88.24	94.68	67.89	70.89	72.78	63.74	47.67	41.67	85.08	100.00	41.11	62.75	87.32	80.96	89.94	70.66
DNI		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 13: Results for Ripper classifier

Training																						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	53.87	65.01	62.21	71.77	65.86	35.61	45.79	96.99	52.14	54.52	79.45	100.00	50.00	65.10	87.62	91.55	71.65	50.58	43.98	79.76	93.23	67.46
EC	54.13	65.52	57.86	70.28	58.22	33.03	42.95	95.42	54.07	36.04	77.16	66.91	25.52	62.50	82.01	78.39	71.11	53.36	40.54	75.27	93.69	61.81
KNNI	54.13	65.52	58.06	70.44	51.78	31.08	42.95	95.19	53.57	43.08	71.19	64.52	25.52	59.40	80.00	78.39	71.11	45.87	40.03	74.41	93.69	60.47
WKNNI	54.13	65.52	58.06	70.44	51.78	31.08	42.95	95.19	53.57	43.08	71.19	64.55	25.52	59.40	80.00	78.39	71.11	45.87	40.03	74.41	93.69	60.47
KMI	54.13	65.52	58.28	70.28	52.92	31.08	42.95	86.64	54.63	43.08	70.88	66.39	25.62	59.40	79.86	78.39	71.11	45.87	28.08	77.11	93.69	59.86
FKMI	54.13	65.52	59.18	70.28	45.35	31.08	42.95	86.20	53.42	43.08	71.19	64.64	25.62	59.40	79.86	78.39	71.11	46.80	28.08	79.30	93.69	59.49
SVMi	54.13	65.52	60.58	70.28	67.61	35.73	42.95	95.26	53.84	43.08	70.95	64.46	26.21	59.40	80.72	78.39	71.11	43.52	27.92	78.96	93.69	61.16
EM	54.13	65.52	55.88	70.28	60.06	26.91	42.95	66.33	58.58	33.39	75.93	68.03	29.11	50.27	80.00	78.88	71.11	44.70	27.73	75.77	93.69	58.54
SVDI	54.13	65.52	55.88	70.28	77.62	27.11	42.95	68.77	52.66	29.57	75.93	65.61	25.81	50.27	79.36	78.88	71.11	44.78	26.35	70.19	93.69	58.40
BPCA	54.13	65.52	56.97	70.28	53.33	31.65	42.95	93.37	57.33	41.76	69.38	65.85	25.52	59.40	82.86	78.39	71.11	43.69	32.28	77.04	93.69	60.31
LLSI	54.13	65.52	59.57	70.28	46.88	31.98	42.95	95.85	54.37	43.82	71.19	63.04	25.47	59.40	80.65	78.39	71.11	43.18	24.86	77.33	93.69	59.70
MC	54.13	65.52	59.18	70.28	53.77	31.08	42.95	86.20	58.37	43.08	71.19	65.85	25.62	59.40	79.86	78.39	71.11	43.77	28.08	79.30	93.69	60.04
CMC	54.13	65.52	59.18	70.28	67.44	33.17	42.95	95.88	55.98	43.08	70.88	87.14	25.96	63.19	81.73	78.39	71.11	43.94	30.07	79.94	93.69	62.55
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Test																						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	53.88	65.00	60.60	69.47	57.10	32.15	47.54	97.17	51.78	50.86	63.42	40.00	0.00	51.67	84.32	91.69	69.03	50.80	79.42	79.42	93.16	59.61
EC	54.12	69.09	57.21	70.33	52.62	28.62	45.47	94.69	52.66	31.07	69.44	65.20	25.24	27.50	81.29	78.39	71.11	42.42	38.42	75.46	93.69	58.29
KNNI	54.12	65.52	58.20	70.69	49.60	30.12	45.47	93.77	52.10	38.93	66.11	63.86	25.24	30.83	79.37	78.39	71.11	45.49	38.10	73.69	93.69	58.30
WKNNI	54.12	65.52	58.20	70.69	49.60	30.12	45.47	93.77	52.10	38.93	66.11	63.86	25.24	30.83	79.37	78.39	71.11	45.49	38.10	73.69	93.69	58.30
KMI	54.12	65.52	58.63	70.33	50.55	30.12	45.47	84.08	53.80	37.68	64.63	65.52	25.24	30.83	80.00	78.39	71.11	42.42	28.68	75.86	93.69	57.46
FKMI	54.12	65.52	59.36	70.33	39.44	30.12	45.47	83.38	52.28	38.93	66.11	64.67	25.24	30.83	79.37	78.39	71.11	42.42	28.68	79.09	93.69	57.07
SVMi	54.12	65.52	60.68	70.33	61.06	30.78	45.47	95.38	52.66	37.68	64.63	61.39	25.24	30.83	80.63	78.39	71.11	43.19	26.84	78.26	93.69	58.47
EM	54.12	65.52	55.88	70.33	54.20	26.39	45.47	66.87	54.19	27.50	68.33	66.29	26.17	30.83	78.75	78.25	71.11	44.67	27.02	75.15	93.69	57.25
SVDI	54.12	65.52	55.88	70.33	68.22	26.42	45.47	69.17	51.35	25.00	68.33	63.55	26.17	30.83	79.37	78.25	71.11	44.67	25.39	71.09	93.69	57.13
BPCA	54.12	65.52	54.14	70.33	51.30	30.49	21.94	49.97	52.09	14.64	56.67	57.86	25.24	22.50	79.37	51.80	71.11	42.47	13.03	52.12	93.69	49.07
LLSI	54.12	65.52	59.36	70.33	42.58	29.37	45.47	95.38	53.41	37.68	66.11	63.05	25.24	30.83	78.75	78.39	71.11	43.19	24.75	75.86	93.69	57.34
MC	54.12	65.52	59.36	70.33	50.60	30.12	45.47	83.38	54.56	38.93	66.11	64.16	25.24	30.83	79.37	78.39	71.11	43.19	28.68	79.09	93.69	57.73
CMC	54.12	65.52	59.36	70.33	57.96	29.78	45.47	95.38	52.67	38.93	64.63	38.57	25.24	27.50	81.25	78.39	71.11	42.42	28.39	77.32	93.69	57.05
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 14: Results for PART classifier

		Training																				
Imp. Meth.	GLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	49.55	97.84	80.88	90.33	49.40	71.23	99.07	100.00	93.80	78.00	98.03	100.00	50.00	79.84	100.00	100.00	89.03	91.70	69.26	85.92	100.00	84.50
EC	55.59	94.39	87.28	88.30	46.22	73.09	99.27	99.56	94.30	84.65	90.58	96.62	88.84	83.31	99.71	100.00	91.48	81.73	60.55	85.74	98.86	85.72
KNNI	56.25	92.04	80.07	88.89	42.99	69.91	99.33	99.26	93.54	88.00	94.65	95.68	88.69	82.61	100.00	100.00	91.73	91.92	60.51	85.37	100.00	85.81
WKNNI	52.00	95.42	80.62	89.24	45.70	69.26	98.84	99.44	93.56	88.01	94.59	95.98	88.84	82.61	100.00	100.00	91.73	92.26	60.55	84.98	99.99	85.89
KMI	54.68	95.80	81.21	88.61	42.78	69.78	99.03	99.56	93.28	88.60	95.00	95.53	88.89	83.30	98.20	100.00	91.73	91.59	60.48	85.49	100.00	85.88
FKMI	49.66	96.25	81.02	89.24	43.00	69.19	99.03	99.64	92.90	88.45	93.85	94.41	88.35	83.30	99.86	100.00	91.60	91.08	60.48	85.19	100.00	85.55
SVMi	50.02	95.17	80.87	88.54	42.37	71.19	99.24	99.77	93.62	88.89	93.99	96.29	88.54	82.25	100.00	100.00	91.48	91.08	60.55	86.20	100.00	85.72
EM	56.62	94.31	79.75	89.90	52.31	49.31	99.15	96.75	92.33	89.19	93.50	97.28	79.30	80.20	99.93	100.00	90.99	93.27	60.91	85.21	100.00	84.77
SVDI	55.26	93.58	80.49	90.99	49.37	49.92	99.09	98.03	92.65	89.62	95.08	96.98	81.51	79.48	99.93	100.00	91.60	94.11	60.91	85.33	99.99	84.95
BPCA	54.53	96.81	80.05	88.65	45.85	69.68	99.21	99.74	92.90	88.60	93.72	96.08	88.99	82.93	100.00	100.00	90.99	92.09	60.55	85.28	100.00	86.03
LLSI	55.74	96.79	78.81	88.93	43.67	71.42	99.06	100.00	93.62	88.30	94.57	97.70	88.79	82.96	100.00	100.00	92.35	91.16	60.51	85.61	100.00	86.19
MC	54.86	89.97	81.00	90.25	40.50	69.59	99.18	99.67	93.60	88.89	95.19	94.93	88.25	82.97	99.86	100.00	92.22	92.85	60.48	85.36	100.00	85.70
CMC	54.75	88.19	81.60	88.81	44.93	79.29	99.06	99.80	93.43	88.16	95.58	100.00	88.69	83.30	100.00	100.00	91.36	91.75	60.48	86.13	100.00	86.44
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Test																				
Imp. Meth.	GLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	47.38	95.90	71.83	70.11	45.19	33.37	91.63	94.70	74.13	50.43	69.85	40.00	0.00	36.67	82.90	100.00	60.83	62.06	65.32	81.24	93.28	65.09
EC	53.78	91.86	81.44	65.77	45.03	39.39	91.79	94.69	74.15	60.71	77.22	79.86	70.77	35.00	81.83	100.00	63.33	57.53	56.03	82.00	93.25	71.21
KNNI	54.46	91.86	74.03	68.56	39.45	37.25	92.33	94.00	73.40	58.75	76.67	64.43	55.87	34.17	83.92	100.00	62.22	56.21	56.04	80.65	94.12	68.97
WKNNI	46.84	94.57	71.85	65.09	42.72	35.79	92.60	93.54	72.46	61.79	74.63	64.16	52.81	37.50	84.50	100.00	53.33	54.56	56.37	80.76	93.88	68.08
KMI	50.80	95.14	76.21	68.27	40.72	38.11	91.51	94.00	71.12	62.86	75.00	68.23	55.00	31.67	82.54	100.00	58.89	56.10	55.71	81.48	93.73	68.91
FKMI	47.14	94.70	75.48	66.52	39.81	38.07	91.50	94.93	74.56	59.29	78.33	65.52	54.13	40.00	85.83	100.00	55.56	58.35	56.35	81.27	93.49	69.09
SVMi	45.77	94.43	74.03	67.20	41.29	36.56	92.61	94.69	75.87	57.86	75.74	66.07	67.75	30.83	84.54	100.00	56.67	57.69	55.41	81.90	93.88	69.08
EM	51.14	92.57	74.17	68.52	49.50	28.78	93.15	90.37	70.36	57.86	72.22	72.29	13.20	46.67	84.50	100.00	57.78	55.99	53.43	79.61	93.33	66.94
SVDI	51.16	90.99	72.43	69.54	44.31	28.58	91.79	90.33	66.96	57.68	74.07	74.67	24.76	49.17	80.54	100.00	63.33	58.30	52.46	80.97	93.29	67.40
BPCA	47.49	44.64	51.82	80.48	51.75	71.45	19.50	50.20	50.19	3.75	59.26	57.09	18.12	28.33	73.54	50.84	47.78	36.37	3.26	51.30	84.33	46.74
LLSI	54.76	95.85	71.87	66.83	40.41	34.74	92.04	94.69	72.65	57.68	74.81	62.22	68.16	37.50	80.67	100.00	57.78	58.30	50.86	79.61	94.12	68.84
MC	52.78	88.42	74.33	63.97	37.36	36.62	90.69	94.93	73.22	60.36	77.04	64.46	54.15	35.00	83.25	100.00	58.89	63.57	56.37	81.07	93.45	68.57
CMC	49.85	86.28	74.75	72.33	44.74	38.20	92.06	95.61	73.02	61.79	76.30	69.69	52.33	37.50	85.71	100.00	57.78	59.84	56.03	82.42	94.04	69.54
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 15: Results for Slipper classifier

		Training																					
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	55.37	96.88	85.65	68.19	63.37	28.03	91.94	92.44	72.40	67.03	73.28	100.00	6.67	31.29	82.22	38.20	57.33	61.06	82.67	79.60	93.17	67.94	
EC	54.13	97.11	56.44	64.88	1.46	39.66	92.24	93.98	52.28	70.47	42.22	63.04	67.95	32.64	79.36	48.20	58.27	37.88	84.69	66.10	93.69	61.75	
KNNI	55.41	96.47	85.05	66.44	61.81	36.91	92.18	93.60	72.12	71.64	74.71	81.55	68.83	32.64	80.72	48.20	58.27	61.45	84.91	79.54	93.77	71.25	
WKNNI	55.41	96.47	85.03	66.44	61.81	36.91	92.18	93.60	72.24	71.64	74.65	82.07	68.83	32.64	80.79	48.20	58.27	61.28	84.91	79.54	93.74	71.27	
KMI	55.19	96.53	85.00	66.40	61.59	36.87	92.24	93.65	72.26	71.93	74.38	83.12	67.36	32.64	82.51	48.20	58.27	60.10	84.51	79.78	93.77	71.25	
FKMI	55.22	96.47	84.92	66.40	62.34	36.87	92.24	93.60	72.77	71.78	74.71	82.85	67.36	32.64	83.01	48.20	58.27	62.29	84.51	79.95	94.08	71.45	
SVMi	55.26	96.53	84.99	66.40	62.72	39.92	92.24	93.88	74.10	71.20	77.00	81.88	69.57	31.95	81.29	48.20	58.27	61.62	84.65	79.96	93.91	71.69	
EM	55.26	96.53	85.21	67.21	70.09	24.00	92.24	90.68	69.39	71.20	74.59	80.13	45.97	33.33	79.00	48.20	58.27	58.92	84.29	79.71	93.74	69.43	
SVDI	55.08	96.58	85.24	67.29	70.09	25.31	92.18	90.04	68.67	70.91	72.20	80.19	49.61	34.36	80.00	48.20	58.27	56.73	84.18	80.22	93.61	69.47	
BPCA	55.22	96.50	84.86	65.54	62.24	36.62	92.24	94.34	73.22	71.64	72.98	83.24	68.09	31.95	80.43	48.20	58.27	61.95	83.82	79.89	93.59	71.18	
LLSI	55.19	96.50	85.15	65.54	61.75	36.00	92.24	94.93	73.22	70.91	73.83	81.67	68.29	34.01	81.72	48.20	58.27	63.80	84.51	80.11	93.92	71.42	
MC	54.93	96.63	84.87	66.40	63.43	36.87	92.24	93.60	72.01	71.78	74.55	83.30	67.36	32.64	81.86	48.20	58.27	61.45	84.51	79.92	93.87	71.37	
CMC	55.22	96.53	84.97	66.40	62.83	43.60	92.24	94.42	74.50	70.32	74.84	91.73	70.60	32.64	83.08	48.20	58.27	64.06	84.87	81.26	93.98	72.60	
DNI	55.19	96.55	85.21	65.00	59.85	41.63	92.18	93.16	67.98	69.74	75.66	82.31	67.36	32.64	80.43	48.20	58.27	52.70	84.65	79.13	93.69	70.55	
Test																							
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	54.80	97.22	85.11	67.43	65.34	30.66	91.89	91.81	73.01	76.43	73.43	40.00	0.00	31.67	82.32	38.19	58.47	61.15	82.68	80.25	93.24	65.48	
EC	54.12	97.29	57.46	62.88	1.46	39.25	92.06	93.53	52.28	71.43	42.22	63.05	68.58	31.67	79.37	48.20	58.89	37.91	84.03	64.21	93.69	61.60	
KNNI	55.05	97.00	84.63	65.01	65.15	38.94	92.06	93.08	73.96	73.75	71.11	82.61	73.04	31.67	81.42	48.20	58.89	60.77	83.71	80.44	94.00	71.64	
WKNNI	55.39	97.00	84.63	65.01	65.15	38.94	92.06	93.08	74.34	73.75	71.11	82.61	73.04	31.67	82.08	48.20	58.89	59.95	83.71	80.44	94.04	71.67	
KMI	55.39	97.00	84.92	65.37	65.15	38.87	92.06	93.54	73.76	73.75	72.04	82.33	68.60	31.67	80.13	48.20	58.89	59.89	84.68	80.75	93.88	71.47	
FKMI	54.72	97.00	84.92	65.37	64.32	38.58	92.06	93.76	73.58	73.75	73.15	82.59	68.60	31.67	81.38	48.20	58.89	62.14	84.68	80.34	94.08	71.61	
SVMi	55.39	96.86	84.63	65.37	64.28	40.16	92.06	93.53	75.86	70.00	73.15	82.58	71.68	31.67	81.38	48.20	58.89	62.14	84.35	79.71	94.08	71.71	
EM	55.05	97.00	84.92	66.70	71.69	25.60	92.06	89.65	68.06	72.08	74.26	79.54	48.28	38.33	80.71	48.20	58.89	64.40	77.83	80.13	93.73	69.89	
SVDI	54.72	96.86	84.63	66.70	71.69	26.31	92.06	89.86	66.92	72.68	71.48	78.47	37.23	35.00	82.67	48.20	68.89	59.84	78.48	80.02	93.37	68.86	
BPCA	42.86	46.22	50.21	63.32	50.35	35.74	21.18	49.51	48.66	6.61	53.89	55.45	20.36	37.50	76.17	48.20	68.89	35.60	3.26	52.02	90.09	45.53	
LLSI	54.72	96.86	84.63	63.93	65.78	38.03	92.06	93.99	75.28	73.93	69.63	83.41	70.36	31.67	83.92	48.20	58.89	62.14	83.38	80.34	94.20	71.68	
MC	54.39	97.14	84.48	65.37	66.64	38.58	92.06	93.76	74.71	73.75	72.04	82.88	68.60	31.67	83.38	48.20	58.89	61.43	84.68	80.23	93.81	71.75	
CMC	55.05	96.86	84.63	65.37	64.28	38.70	92.06	93.99	76.81	70.00	69.26	88.03	69.94	31.67	83.96	48.20	58.89	65.11	85.00	81.80	94.04	72.08	
DNI	54.72	97.00	84.63	63.90	62.60	44.31	92.06	92.61	68.43	72.68	74.44	82.33	68.60	31.67	81.38	48.20	58.89	52.53	84.68	79.82	93.96	70.93	

Table 16: Results for 3-NN classifier

Imp. Meth.	Training																	Test																
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean												
IM	67.82	98.62	97.65	90.33	99.79	84.16	100.00	100.00	97.67	100.00	99.16	40.00	23.33	100.00	100.00	100.00	89.52	79.18	100.00	63.35	99.29	87.14												
EC	66.89	97.25	97.34	90.36	99.68	81.60	100.00	99.39	100.00	100.00	99.05	99.03	100.00	100.00	100.00	100.00	91.11	83.76	100.00	65.01	99.16	93.80												
KNNI	66.67	96.63	97.86	91.18	98.97	81.04	100.00	96.83	99.98	100.00	99.61	98.58	100.00	100.00	100.00	100.00	88.40	82.75	100.00	64.32	99.98	93.47												
WKNNI	66.70	97.12	97.32	87.80	99.08	81.01	100.00	96.83	99.98	100.00	99.67	98.73	100.00	100.00	100.00	100.00	90.37	80.47	100.00	63.93	99.97	93.25												
KMI	66.81	97.06	97.16	89.70	99.19	81.20	100.00	99.62	99.01	100.00	99.64	98.70	100.00	100.00	100.00	100.00	91.36	83.93	100.00	64.66	99.92	93.71												
FKMI	66.67	98.11	96.97	89.24	99.46	81.27	100.00	99.67	99.96	100.00	99.34	98.64	100.00	100.00	100.00	100.00	90.12	87.80	99.89	63.33	99.84	93.81												
SVMi	66.67	98.11	98.47	91.10	100.00	84.97	100.00	98.52	100.00	100.00	99.65	99.15	100.00	100.00	100.00	100.00	90.37	83.68	100.00	62.96	99.91	93.98												
EM	66.70	99.05	96.61	88.61	99.84	35.48	100.00	95.37	98.63	100.00	99.84	94.81	84.61	100.00	100.00	100.00	87.90	73.23	100.00	64.29	99.64	89.74												
SVDI	66.81	97.35	97.05	89.24	100.00	40.58	100.00	96.95	99.11	100.00	99.71	94.93	89.97	100.00	100.00	100.00	87.16	73.25	100.00	64.81	99.63	90.31												
BPCA	66.85	97.39	97.06	91.34	98.21	80.68	100.00	99.77	100.00	100.00	99.47	99.88	100.00	100.00	100.00	100.00	90.00	85.53	100.00	64.49	99.96	93.78												
LLSI	66.78	97.44	97.47	88.15	98.86	83.60	100.00	100.00	99.96	100.00	99.09	99.97	100.00	100.00	100.00	100.00	90.99	86.79	100.00	64.75	99.98	93.99												
MC	66.89	97.38	97.60	90.64	99.19	81.23	100.00	99.67	98.94	100.00	99.32	97.86	100.00	100.00	100.00	100.00	89.63	84.43	100.00	64.09	99.63	93.64												
CMC	66.70	97.41	97.65	90.75	100.00	85.79	100.00	99.80	100.00	100.00	99.63	100.00	100.00	100.00	100.00	100.00	90.49	83.10	100.00	64.89	99.93	94.10												
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean												
IM	57.88	93.42	80.18	72.92	82.19	36.53	87.42	93.45	67.45	59.81	69.62	40.00	0.00	45.00	83.92	100.00	61.94	65.67	84.50	60.11	91.87	68.28												
EC	57.43	91.85	79.11	72.41	77.73	34.08	87.95	93.77	67.51	61.61	72.04	80.16	54.92	27.50	79.25	100.00	63.33	51.70	82.09	61.19	93.09	70.89												
KNNI	57.42	91.57	76.65	71.76	79.19	35.79	88.78	90.78	65.63	70.18	71.48	77.45	35.55	27.50	79.92	100.00	60.00	53.85	79.48	61.29	93.49	69.89												
WKNNI	56.76	90.85	79.69	71.72	82.77	34.38	92.06	91.69	70.16	71.07	75.19	75.84	35.50	34.17	76.08	100.00	57.78	57.58	80.45	61.60	93.45	70.90												
KMI	57.40	90.99	79.08	73.15	77.67	36.41	90.97	93.53	69.95	63.39	71.48	76.39	52.57	28.33	77.46	100.00	62.22	53.68	78.53	61.18	92.82	70.82												
FKMI	58.08	92.85	80.13	73.13	76.37	34.93	89.62	93.54	69.58	60.71	74.44	74.48	40.02	44.17	79.33	100.00	64.44	55.33	81.13	60.46	93.05	71.23												
SVMi	58.08	92.28	77.95	71.75	75.69	33.98	88.53	92.83	68.26	69.64	72.22	74.46	50.59	40.83	87.71	100.00	62.22	58.30	82.45	61.19	93.49	72.02												
EM	56.43	92.71	79.26	72.09	81.55	25.32	86.86	87.80	63.69	68.57	70.19	71.74	38.97	49.17	79.38	99.91	58.89	56.70	78.84	61.08	92.98	70.10												
SVDI	57.43	91.70	78.10	74.11	78.61	26.34	87.70	86.19	61.23	67.14	70.19	73.85	44.43	44.17	80.04	99.68	64.44	52.14	78.47	61.92	93.02	70.04												
BPCA	44.81	46.64	50.66	86.75	89.10	63.75	19.50	50.20	50.19	3.75	57.04	54.38	18.12	28.33	74.21	50.84	46.67	36.37	3.26	52.24	84.37	48.15												
LLSI	56.43	93.00	79.11	70.34	78.13	33.90	89.06	94.69	67.30	64.29	73.52	75.82	49.98	30.83	86.46	100.00	63.33	55.88	73.37	62.85	93.45	71.03												
MC	57.42	92.28	79.70	71.72	77.81	34.57	89.05	93.77	67.50	67.32	73.89	77.46	38.74	27.50	77.42	100.00	60.00	55.99	80.16	61.08	92.50	70.28												
CMC	56.76	91.57	79.99	71.34	76.84	34.97	89.32	94.00	69.39	61.61	73.52	64.35	39.15	50.83	84.46	100.00	63.33	59.67	80.47	61.91	93.33	71.28												
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												

Table 17: Results for AQ classifier

Imp. Meth.	Training																	Test																										
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	63.94	98.11	87.05	79.06	96.49	70.86	96.08	97.75	93.34	100.00	97.67	40.00	23.33	100.00	96.26	98.44	77.65	87.22	95.49	83.29	93.07	84.53	53.85	94.73	81.02	72.34	77.83	39.08	86.84	94.11	70.13	74.10	68.82	40.00	0.00	61.67	80.07	98.44	71.25	59.56	83.31	80.49	93.05	70.51
EC	64.36	97.65	86.66	77.12	95.83	66.70	95.83	96.57	93.09	99.12	97.78	83.85	96.90	99.66	91.61	98.52	76.91	86.87	95.91	82.48	93.71	89.39	55.13	94.14	78.96	71.07	78.73	41.49	86.58	93.08	73.78	69.64	77.22	77.99	74.80	56.67	81.25	98.52	68.89	59.78	84.99	80.02	93.65	76.02
KNNI	63.84	97.55	86.47	77.00	95.34	64.18	95.62	96.34	93.66	99.12	97.78	83.60	96.51	99.66	91.75	98.52	76.91	87.29	96.24	82.11	94.03	89.22	55.46	94.85	79.98	71.42	81.74	41.89	86.03	94.47	73.02	70.89	77.22	77.47	69.96	56.67	81.96	98.52	68.89	69.78	85.31	78.05	93.73	76.41
WKNNI	64.06	97.55	86.50	77.00	95.23	64.18	95.62	96.34	93.09	99.12	97.78	83.64	96.51	99.66	91.61	98.52	76.91	87.29	96.24	82.11	94.03	89.19	55.80	93.85	80.13	71.42	82.26	41.75	86.30	93.77	73.58	70.89	77.59	75.82	72.59	56.67	81.96	98.52	68.89	69.01	85.31	78.05	93.76	76.53
KMI	64.21	97.54	86.44	77.00	95.39	64.21	95.89	96.57	93.43	99.12	97.78	83.06	97.00	99.66	91.83	98.52	76.91	86.79	96.13	82.01	94.01	89.21	56.13	95.14	79.54	71.42	79.76	42.32	86.30	93.54	71.29	70.89	77.78	75.02	72.63	56.67	81.33	98.52	68.89	62.91	84.05	79.19	93.73	76.21
FKMI	64.21	97.58	86.34	77.00	95.39	64.21	95.89	96.52	93.49	99.12	97.78	83.15	97.00	99.66	91.47	98.52	76.91	87.71	96.13	82.07	94.05	89.25	54.81	93.99	79.40	71.42	80.73	40.67	87.13	93.30	71.30	70.89	77.04	74.47	72.67	56.67	83.87	98.52	68.89	71.98	84.39	79.29	93.73	76.44
SVMII	64.14	97.65	86.49	77.00	96.09	65.10	95.98	96.39	94.13	99.12	97.78	83.18	96.81	99.66	96.63	98.52	76.91	87.63	95.66	82.76	94.32	89.62	55.80	94.00	78.97	70.04	80.50	30.27	86.85	88.27	65.96	65.54	76.30	72.27	39.90	52.50	81.33	98.52	68.89	59.01	81.45	78.46	93.69	72.31
EM	64.03	97.70	86.29	77.04	96.31	46.61	95.83	93.65	91.40	100.00	97.76	83.18	75.52	97.91	91.04	98.52	76.91	82.07	95.59	82.18	93.70	86.82	56.70	94.14	80.13	70.04	84.04	32.22	86.84	89.64	66.36	66.96	76.11	72.82	42.73	52.50	79.38	98.52	70.00	59.84	80.53	78.46	93.69	72.88
SVDI	64.36	97.42	86.44	77.00	96.37	50.09	95.80	93.40	90.85	100.00	97.76	82.97	79.11	97.91	91.76	98.52	77.16	81.48	95.69	82.14	93.70	87.14	45.16	47.22	56.46	77.33	89.19	56.66	20.34	49.97	49.04	3.75	57.04	59.23	17.69	28.33	78.75	50.84	62.22	39.34	3.26	50.98	93.13	49.33
BPCA	64.50	97.39	85.74	77.12	95.23	64.41	96.04	96.75	93.37	99.27	97.70	84.69	96.70	99.66	91.83	98.52	76.91	86.53	95.98	82.37	94.05	89.27	55.78	94.14	78.97	71.07	82.78	40.27	86.30	94.24	72.25	70.89	78.15	75.83	64.66	56.67	81.79	98.52	70.00	59.12	79.19	77.84	93.69	75.34
LLSI	64.25	97.62	86.28	77.12	95.01	65.44	95.92	97.29	92.97	99.12	97.78	83.54	97.00	99.66	92.54	98.52	77.04	87.21	95.84	82.10	93.97	89.34	55.13	93.85	79.11	71.42	82.68	42.32	86.30	93.54	71.66	70.89	77.59	74.74	72.63	56.67	82.58	98.52	68.89	62.80	84.38	79.19	93.69	76.12
MC	64.36	97.77	86.39	77.00	95.77	64.21	95.89	96.52	93.03	99.12	97.78	83.06	97.00	99.66	91.90	98.52	76.91	87.55	96.13	82.36	93.71	89.27	55.80	94.14	79.11	71.42	82.65	39.61	86.57	94.23	72.79	69.64	77.22	60.78	69.98	56.67	81.29	98.52	68.89	69.67	83.73	78.88	93.76	75.49
CMC	64.03	97.73	86.37	77.00	96.26	70.37	95.80	97.29	94.23	99.12	97.82	98.91	98.48	99.66	96.56	98.52	76.91	88.72	96.31	82.85	94.42	90.83	64.06	97.73	86.37	77.00	95.88	66.70	96.44	96.34	93.90	100.00	97.78	82.97	96.95	99.66	91.11	98.52	76.05	89.39	95.51	81.55	93.79	89.41
DNI	64.06	97.73	86.37	77.00	95.88	66.70	96.44	96.34	93.90	100.00	97.78	82.97	96.95	99.66	91.11	98.52	76.05	89.39	95.51	81.55	93.79	89.41																						

Table 18: Results for CN2 classifier

		Training																				
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	64.98	97.28	86.71	79.82	90.58	80.38	100.00	96.99	83.46	100.00	98.36	100.00	100.00	100.00	98.33	100.00	73.69	90.79	97.16	82.92	93.07	91.17
EC	63.70	97.52	87.32	77.31	98.86	65.26	100.00	97.44	93.28	100.00	98.54	87.86	100.00	100.00	96.06	100.00	72.84	83.00	97.32	82.22	94.76	90.16
KNNI	64.98	96.98	85.97	77.20	88.68	64.68	100.00	96.26	84.56	100.00	98.54	88.53	100.00	100.00	94.19	100.00	72.72	85.43	97.50	82.55	93.69	89.16
WKNNI	64.87	96.98	85.97	77.19	88.57	64.74	100.00	96.31	84.60	100.00	98.54	88.01	100.00	100.00	94.12	100.00	72.96	85.43	97.43	82.55	93.69	89.14
KMI	65.13	97.06	85.97	77.15	88.68	64.68	100.00	96.98	84.66	100.00	98.52	88.01	100.00	100.00	94.63	100.00	72.72	85.10	97.50	82.34	93.69	89.18
FKMI	65.49	97.00	85.97	77.19	88.62	64.64	100.00	97.11	84.39	100.00	98.58	88.68	100.00	100.00	95.20	100.00	72.96	86.36	97.58	82.28	93.69	89.32
SVMI	65.16	97.00	86.07	77.23	88.19	66.57	100.00	96.19	84.75	100.00	98.64	89.19	100.00	100.00	96.35	100.00	72.72	86.19	97.58	82.74	93.69	89.44
EM	65.46	97.08	86.32	77.82	91.87	50.18	100.00	92.63	78.69	100.00	98.29	87.20	81.47	100.00	94.98	100.00	72.72	85.60	97.54	82.09	93.69	87.32
SVDI	64.87	96.88	86.36	78.05	92.04	51.52	100.00	92.63	78.22	100.00	98.52	86.29	86.92	100.00	96.41	100.00	72.96	85.43	97.58	81.92	93.69	87.63
BPCA	65.38	97.00	85.53	77.66	88.84	63.23	100.00	96.75	83.95	100.00	98.54	88.25	100.00	100.00	94.70	100.00	72.72	84.09	97.58	82.36	93.69	89.06
LLSI	65.49	97.03	86.08	77.51	89.06	63.20	100.00	97.95	83.86	100.00	98.50	88.56	100.00	100.00	96.20	100.00	72.96	85.27	97.58	82.46	93.69	89.30
MC	65.31	97.04	85.97	77.12	88.68	64.51	100.00	97.08	84.18	100.00	98.60	87.89	100.00	100.00	94.12	100.00	72.96	86.28	97.47	82.28	93.69	89.20
CMC	65.38	97.03	85.97	77.00	88.62	74.47	100.00	98.00	84.85	100.00	98.91	96.59	100.00	100.00	95.99	100.00	72.96	86.70	97.58	83.21	93.69	90.33
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Test																				
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	58.27	96.77	86.02	71.22	72.81	39.74	96.94	97.17	78.27	86.29	75.36	40.00	20.00	53.33	82.84	100.00	67.78	56.91	89.02	82.68	93.05	73.55
EC	59.11	97.00	85.21	69.60	82.76	43.00	97.00	95.85	72.26	84.11	80.37	80.95	79.33	42.50	82.62	100.00	66.67	57.47	90.22	81.59	93.73	78.16
KNNI	58.11	96.57	84.77	69.96	71.33	45.57	97.00	95.16	79.68	85.36	80.37	82.58	79.29	40.00	80.67	100.00	66.67	53.68	90.23	81.48	93.69	77.72
WKNNI	58.44	96.57	84.77	69.96	71.33	46.48	97.00	95.16	79.48	85.36	80.19	82.31	79.29	40.00	80.04	100.00	66.67	53.68	89.89	81.48	93.69	77.70
KMI	57.78	96.57	84.77	70.98	70.37	46.57	97.00	95.39	79.87	85.36	80.37	82.88	78.00	40.00	81.96	100.00	66.67	52.25	89.89	81.80	93.09	77.69
FKMI	57.45	96.71	84.77	70.98	71.82	48.05	97.00	95.62	79.11	85.36	82.41	81.52	78.44	40.00	83.92	100.00	66.67	56.76	90.22	81.59	93.69	78.19
SVMI	57.45	96.42	84.34	70.98	71.31	45.40	97.00	96.31	80.25	84.11	80.19	80.11	78.89	40.00	83.88	100.00	66.67	59.01	89.89	81.07	93.69	77.95
EM	57.78	96.86	85.21	70.64	77.11	34.55	97.00	92.64	73.02	80.36	77.96	79.31	48.32	48.33	80.75	100.00	66.67	57.47	88.25	81.80	93.69	75.61
SVDI	57.80	96.71	84.78	70.31	78.19	35.88	97.00	92.64	71.51	81.79	77.41	79.32	50.61	48.33	83.92	100.00	66.67	60.49	88.25	81.80	93.69	76.05
BPCA	40.92	45.36	47.46	72.10	76.76	51.64	19.50	49.51	49.99	3.75	56.85	52.76	18.12	28.33	78.71	50.84	68.89	35.60	3.26	52.02	93.69	47.43
LLSI	58.77	96.42	84.63	69.26	72.26	45.80	97.00	96.31	76.63	84.11	78.33	82.33	79.33	42.50	81.92	100.00	66.67	55.22	87.61	81.48	93.69	77.63
MC	58.12	96.71	84.77	70.98	69.53	47.76	97.00	95.62	80.63	85.36	80.74	82.33	78.44	40.00	81.38	100.00	66.67	55.99	89.89	81.59	93.69	77.96
CMC	58.11	96.57	84.92	71.32	71.81	44.89	97.00	96.77	80.06	85.36	76.85	84.80	79.76	42.50	86.46	100.00	66.67	61.26	88.92	81.17	93.69	78.52
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 19: Results for SMO classifier

Imp. Meth.	Training																Test																												
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	
IM	35.99	73.52	63.24	32.69	9.29	12.42	28.33	71.08	0.73	26.84	68.57	100.00	100.00	39.07	58.87	100.00	13.03	48.80	39.56	67.30	13.86	47.77	36.27	72.90	61.94	30.96	9.29	9.09	11.97	70.78	0.26	4.76	65.36	0.00	10.00	31.67	33.47	100.00	9.17	38.79	33.31	65.46	13.70	33.77	
EC	39.79	75.33	60.84	33.06	13.71	8.69	26.47	80.23	0.19	24.56	67.49	40.52	100.00	36.83	41.98	72.05	19.38	44.61	38.66	53.64	18.76	42.70	38.60	73.11	60.53	32.46	14.09	8.63	11.55	80.18	0.19	8.21	58.70	38.33	0.43	31.67	34.58	72.13	11.11	43.96	29.62	51.20	18.66	34.19	
KNNI	38.24	71.01	60.33	32.95	13.33	10.51	28.00	77.32	0.19	24.56	61.50	38.19	100.00	36.83	42.18	66.37	22.59	48.99	38.66	54.72	18.20	42.13	35.95	68.68	60.53	32.46	13.16	10.09	12.37	75.28	0.19	8.21	57.96	40.75	0.43	31.67	32.75	63.22	13.33	46.92	29.62	54.41	17.21	33.58	
WKNNI	38.28	71.01	60.83	32.95	13.33	10.51	28.00	77.32	0.19	24.56	61.50	37.50	100.00	36.83	41.46	66.37	22.59	48.99	38.66	54.72	18.24	42.09	35.95	69.25	60.53	32.46	13.16	9.48	12.09	80.61	0.19	8.21	57.78	37.22	0.43	31.67	32.08	71.87	12.22	44.62	29.62	52.24	14.20	33.61	
KMI	38.94	72.55	60.30	32.95	13.33	10.51	27.11	79.21	0.19	24.56	60.82	37.05	100.00	36.83	41.58	71.83	22.59	46.55	38.22	53.96	14.11	42.06	34.96	67.96	60.82	32.46	13.16	10.09	12.09	79.68	0.19	8.21	58.15	38.33	0.43	31.67	41.58	71.87	13.33	43.85	29.96	48.28	18.60	34.08	
FKMI	36.93	69.51	61.12	32.95	13.33	10.51	27.11	79.39	0.19	24.56	62.24	39.01	100.00	36.83	46.50	71.83	22.59	46.89	38.22	49.09	19.24	42.29	34.65	74.39	59.23	32.46	14.51	7.70	12.09	75.32	0.19	8.21	58.15	39.38	0.43	31.67	28.83	66.47	13.33	43.85	28.96	58.68	21.12	33.79	
SVMII	38.24	76.16	59.30	32.95	15.23	10.19	27.32	75.78	0.19	24.56	64.12	41.00	100.00	36.83	33.86	66.37	22.59	45.11	37.57	60.60	22.56	42.41	34.98	71.25	62.41	32.15	27.56	6.55	12.37	77.20	0.75	6.79	57.78	36.95	0.43	31.67	40.50	74.77	12.22	48.46	28.96	54.31	62.45	37.17	
EM	37.26	73.12	64.96	33.56	29.65	9.28	27.29	78.77	0.30	24.71	61.95	36.96	35.84	37.51	44.58	78.35	22.59	50.68	36.81	56.33	61.73	42.96	28.05	39.77	54.29	31.74	13.16	8.58	8.24	56.22	0.19	2.50	57.78	37.76	18.12	56.67	28.17	50.73	8.89	46.26	4.55	48.49	14.92	29.29	
SVDI	39.31	74.23	64.94	33.57	31.60	9.23	27.23	82.54	0.36	24.71	62.74	36.96	32.74	37.51	53.42	79.92	15.08	50.76	37.35	55.32	75.47	44.08	34.62	72.53	60.38	31.77	13.62	8.65	12.37	82.46	0.19	8.21	58.89	36.95	0.43	31.67	33.96	75.58	10.00	46.37	28.62	55.15	18.91	34.35	
BPCA	38.32	70.58	60.80	33.06	13.44	10.68	22.95	79.85	0.19	24.56	62.67	39.43	100.00	36.83	40.29	73.50	22.59	44.45	31.05	52.69	15.85	41.61	34.62	74.82	60.82	32.46	14.64	10.09	12.09	79.68	0.19	8.21	57.96	37.76	0.43	31.67	29.54	71.87	13.33	46.15	29.96	47.97	15.91	34.01	
LLSI	37.11	74.03	61.12	33.06	13.23	9.96	27.57	82.00	0.19	24.56	65.43	37.53	100.00	40.63	43.97	75.64	19.38	49.25	37.25	56.92	19.10	43.23	34.96	74.96	60.33	32.95	14.20	8.58	28.33	86.25	0.19	24.56	61.50	54.14	100.00	36.83	28.63	71.83	22.59	45.87	38.22	49.42	20.78	42.80	
MC	39.79	76.28	60.17	32.95	14.53	10.51	27.11	79.39	0.19	24.56	61.67	37.56	100.00	36.83	38.92	71.83	22.59	50.08	38.22	49.14	16.01	42.30	37.15	76.47	60.33	32.95	14.20	8.58	28.33	86.25	0.19	24.56	61.50	54.14	100.00	36.83	28.63	71.83	22.59	45.87	38.22	49.42	20.78	42.80	
CMC	37.15	76.47	60.33	32.95	14.20	8.58	28.33	86.25	0.19	24.56	61.50	54.14	100.00	36.83	28.63	71.83	22.59	45.87	38.22	49.42	20.78	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 20: Results for LBR classifier

Imp. Meth.	Training																Mean					
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS		POS	ECH	SOY	MAM	OZO
IM	96.88	55.37	85.65	68.19	63.37	28.03	91.94	92.44	72.40	67.03	73.28	100.00	0.00	31.29	82.22	100.00	57.33	61.06	82.67	79.60	93.17	70.57
EC	97.11	58.60	84.08	64.88	60.54	39.66	92.24	93.98	74.38	70.47	76.07	81.16	67.95	32.64	86.81	100.00	58.27	59.85	84.69	66.10	92.93	73.48
KNNI	96.47	55.41	85.05	66.44	61.81	36.91	92.18	93.60	72.12	71.64	74.71	81.55	68.83	32.64	80.72	100.00	58.27	61.45	84.91	79.54	93.77	73.71
WKNNI	96.47	55.41	85.03	66.44	61.81	36.91	92.18	93.60	72.24	71.64	74.65	82.07	68.83	32.64	80.79	100.00	58.27	61.28	84.91	79.54	93.74	73.73
KMI	96.60	55.22	85.02	66.40	61.70	36.87	92.21	93.68	72.29	71.93	74.24	83.09	67.36	32.64	81.22	100.00	58.27	61.37	84.51	79.91	93.77	73.73
FKMI	96.47	55.22	84.94	66.40	62.23	36.87	92.24	93.60	72.71	71.78	74.38	82.76	67.36	32.64	82.65	100.00	58.27	62.21	84.51	79.94	94.05	73.87
SVMi	96.53	55.26	84.99	66.40	62.72	39.92	92.24	93.88	74.10	77.00	71.20	81.88	69.57	31.95	81.29	100.00	58.27	61.62	84.65	79.96	93.91	74.16
EM	96.53	55.26	85.21	67.21	70.09	24.00	92.24	90.68	69.39	71.20	74.59	80.13	45.97	33.33	79.00	100.00	58.27	58.92	84.29	79.71	93.74	71.89
SVDI	96.58	55.08	85.24	67.29	70.09	25.31	92.18	90.04	68.67	70.91	72.20	80.19	49.61	34.36	80.00	100.00	58.27	56.73	84.18	80.22	93.61	71.94
BPCA	96.50	55.22	84.86	65.54	62.24	36.62	92.24	94.34	73.22	71.64	72.98	83.24	68.09	31.95	80.43	100.00	58.27	61.95	83.82	79.89	93.59	73.65
LLSI	96.50	55.19	85.15	65.54	61.75	36.00	92.24	94.93	73.22	70.91	73.83	81.67	68.29	34.01	81.72	100.00	58.27	63.80	84.51	80.11	93.92	73.88
MC	96.63	54.93	84.87	66.40	63.43	36.87	92.24	93.60	72.01	71.78	74.55	83.30	67.36	32.64	81.86	100.00	58.27	61.45	84.51	79.92	93.87	73.83
CMC	96.53	55.22	84.97	66.40	62.83	43.60	92.24	94.42	74.50	70.32	74.84	91.73	70.60	32.64	83.08	100.00	58.27	64.06	84.87	81.26	93.98	75.06
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Imp. Meth.	Test																Mean					
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS		POS	ECH	SOY	MAM	OZO
IM	97.22	54.80	85.11	67.43	65.34	30.66	91.89	91.81	73.01	76.43	73.43	40.00	0.00	31.67	82.32	100.00	58.47	61.15	82.68	80.25	93.24	68.42
EC	97.29	60.10	86.22	62.88	58.26	39.25	92.06	93.53	69.97	71.43	73.52	80.95	68.58	31.67	87.13	100.00	58.89	60.66	84.03	64.21	92.38	73.00
KNNI	97.00	55.05	84.63	65.01	65.15	38.94	92.06	93.08	73.96	73.75	71.11	82.60	73.04	31.67	81.42	100.00	58.89	60.77	83.71	80.44	94.00	74.11
WKNNI	97.14	55.05	84.63	65.37	65.15	38.28	92.06	93.76	73.76	72.50	72.04	82.61	73.04	31.67	82.08	100.00	58.89	59.95	83.71	80.44	94.04	74.14
KMI	97.00	54.72	84.92	65.37	64.71	38.58	92.06	93.76	74.53	73.75	72.78	82.58	68.60	31.67	81.42	100.00	58.89	60.66	84.68	81.38	93.92	74.02
FKMI	96.86	55.39	84.63	65.37	64.28	40.16	92.06	93.53	75.86	70.00	73.15	82.58	71.68	31.67	81.38	100.00	58.89	62.14	84.35	79.71	94.08	74.18
SVMi	96.86	55.39	84.63	65.37	64.28	40.16	92.06	93.53	75.86	70.00	73.15	82.58	71.68	31.67	81.38	100.00	58.89	62.14	84.35	79.71	94.08	74.18
EM	97.00	55.05	84.92	66.70	71.69	25.60	92.06	89.65	68.06	72.68	74.26	79.54	48.28	38.33	80.71	100.00	58.89	64.40	77.83	80.13	93.73	72.36
SVDI	96.86	54.72	84.63	66.70	71.69	26.31	92.06	89.86	66.92	72.68	71.48	78.47	37.23	35.00	82.67	100.00	58.89	59.84	78.48	80.02	93.37	71.33
BPCA	46.22	42.86	50.21	63.32	50.35	35.74	21.18	49.51	48.66	6.61	53.80	55.45	20.36	37.50	76.17	50.84	68.89	35.60	3.26	52.02	90.09	45.65
LLSI	96.86	54.72	84.63	63.93	65.78	38.03	92.06	93.99	75.28	73.93	69.63	83.41	70.36	31.67	83.92	100.00	58.89	62.14	83.38	80.34	94.20	74.15
MC	97.14	54.39	84.48	65.37	66.64	38.58	92.06	93.76	74.71	73.75	72.04	82.88	68.60	31.67	83.38	100.00	58.89	61.43	84.68	80.23	93.81	74.21
CMC	96.86	55.05	84.63	65.37	64.28	38.70	92.06	93.99	76.81	70.00	69.26	88.03	69.94	31.67	83.96	100.00	58.89	65.11	85.00	81.80	94.04	74.55
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 21: Results for LWL classifier

Imp. Meth.	Training																Test																											
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	56.34	85.32	67.61	76.06	75.44	30.91	84.25	91.59	64.70	84.58	94.98	0.00	100.00	89.73	97.64	100.00	73.31	70.24	77.36	32.86	94.04	74.62	54.21	84.94	66.28	71.45	66.37	23.30	78.39	91.70	57.91	62.76	56.58	0.00	20.00	56.67	100.00	64.44	63.31	69.78	53.27	93.15	62.58	
EC	57.28	83.87	64.70	76.26	73.96	29.34	84.81	90.19	64.79	76.29	94.67	79.68	53.00	86.10	94.19	100.00	73.09	61.95	68.19	55.72	94.41	74.40	56.44	82.11	61.82	66.77	59.72	28.77	75.67	90.30	57.79	60.00	59.63	74.17	42.09	44.17	81.83	100.00	67.78	47.58	65.48	55.57	93.49	65.29
KNNI	57.32	82.75	65.22	76.07	72.19	28.48	83.38	69.05	65.25	77.02	94.90	80.95	48.77	86.10	92.33	100.00	73.46	66.25	69.82	54.76	94.41	73.26	56.44	81.54	62.55	67.48	60.48	27.06	69.59	70.92	58.00	61.43	59.44	77.72	36.78	37.50	79.25	99.96	67.78	47.58	63.88	55.05	93.53	63.52
WKNNI	57.32	82.75	64.73	76.07	71.04	28.48	83.38	69.05	65.34	77.02	94.88	80.74	48.77	86.10	92.90	100.00	73.46	66.25	69.82	54.76	94.47	73.21	56.44	80.54	62.55	66.41	60.11	27.35	72.08	81.81	60.26	61.43	59.26	72.58	45.59	40.00	15.63	100.00	67.78	45.99	68.75	55.05	93.29	61.57
KMI	57.28	82.55	66.10	75.41	72.12	28.71	84.14	82.41	64.62	77.02	94.84	79.23	54.52	86.45	18.27	100.00	73.46	65.82	71.88	55.43	94.43	70.70	56.44	81.98	62.98	66.41	60.86	27.35	73.73	83.21	60.42	61.43	59.26	72.29	46.05	40.00	81.33	100.00	67.78	48.30	68.75	55.46	93.45	65.12
FKMI	57.32	83.31	65.35	75.41	72.35	28.71	85.33	82.08	63.63	77.02	95.19	81.43	54.52	86.45	93.05	100.00	73.46	66.25	71.88	55.44	94.48	74.41	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
SVMII	57.32	83.63	65.73	75.41	71.14	27.67	84.99	73.30	66.31	77.31	95.06	80.34	50.14	85.41	96.92	100.00	73.46	66.33	71.63	55.56	94.72	73.92	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
EM	57.32	83.26	64.28	75.99	80.79	26.03	84.72	70.45	60.94	72.06	94.40	76.27	44.94	90.60	91.62	99.83	73.46	63.47	73.33	0.00	94.16	70.38	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
SVDI	57.28	82.53	64.81	76.46	80.20	26.45	85.54	65.72	59.72	71.33	95.35	77.63	40.37	90.60	93.11	99.83	21.73	61.53	74.30	0.00	94.09	67.55	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
BPCA	57.28	83.15	64.55	76.03	73.05	28.03	84.63	83.21	63.82	77.75	94.92	80.77	50.78	84.73	94.05	100.00	73.46	65.41	74.19	55.16	94.67	74.27	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
LLSI	57.32	83.20	65.41	76.03	72.77	28.72	84.63	91.14	64.85	77.02	94.77	82.94	52.55	85.75	95.55	100.00	73.46	66.41	74.09	49.12	94.73	74.78	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
MC	57.28	83.98	64.43	75.41	72.99	28.71	85.33	82.08	64.51	77.02	95.04	78.62	54.52	86.44	92.26	100.00	73.46	66.75	71.88	55.35	94.74	74.32	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
CMC	57.32	84.63	64.67	75.41	72.12	31.60	84.20	91.81	65.55	77.02	95.31	97.22	54.82	86.44	96.77	100.00	73.46	64.81	72.96	55.50	94.96	76.03	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.44	81.55	62.41	67.87	69.90	24.17	73.73	65.20	53.97	61.48	61.48	69.02	42.51	56.67	80.04	99.43	67.78	52.09	69.72	0.00	93.61	62.47

Table 22: Results for SRI classifier

Imp. Meth.	Training																Mean					
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS		POS	ECH	SOY	MAM	OZO
IM	58.66	92.09	63.51	75.61	77.42	30.58	58.79	96.99	59.65	65.74	85.34	100.00	100.00	80.28	96.91	99.53	71.51	85.44	24.48	82.51	90.47	75.98
EC	59.99	92.99	60.04	75.02	74.24	36.39	60.95	94.34	59.06	69.90	84.94	77.53	100.00	53.89	91.97	97.95	67.78	70.18	14.05	79.42	92.96	72.08
KNNI	58.71	92.58	57.89	75.06	72.06	28.65	60.91	95.62	61.17	69.90	76.13	76.84	100.00	53.89	88.16	97.95	67.28	69.20	23.24	75.00	92.69	71.09
WKNNI	58.74	92.58	58.22	75.06	71.92	28.65	60.91	95.62	59.34	69.90	76.03	75.36	100.00	53.89	89.11	97.95	67.28	69.20	23.24	75.00	92.98	71.00
KMI	59.41	93.56	60.99	74.83	72.78	27.95	59.91	95.62	58.83	69.90	80.84	75.15	100.00	53.89	16.62	97.95	67.28	70.70	30.18	75.45	92.43	68.30
FKMI	59.37	91.27	60.59	74.83	76.32	27.95	60.55	95.62	60.92	69.90	75.08	75.33	100.00	53.89	89.25	97.95	67.28	75.33	30.18	74.76	92.03	71.83
SVMI	58.89	93.01	61.04	74.83	76.44	30.12	60.64	95.70	61.53	69.75	78.81	68.87	100.00	53.89	96.92	97.95	67.28	73.56	30.22	80.18	91.92	72.46
EM	59.37	93.01	57.46	74.86	81.35	25.46	60.64	91.45	56.08	68.27	79.36	69.27	40.55	85.80	83.23	98.72	67.28	78.53	35.57	0.00	90.53	66.51
SVDI	59.63	92.72	58.33	74.32	81.24	28.39	60.82	86.57	55.03	68.27	79.79	78.77	36.43	85.80	83.59	98.72	20.74	76.68	32.14	0.00	91.56	64.26
BPCA	59.77	93.24	57.75	74.56	71.03	34.71	61.10	95.90	59.34	69.90	74.88	76.57	100.00	53.89	93.69	97.95	67.28	74.98	29.78	75.23	92.97	72.12
LLSI	59.33	93.48	63.75	74.56	76.09	37.16	60.76	96.31	58.75	69.90	85.23	75.69	100.00	53.89	92.24	97.95	68.64	78.03	32.39	67.52	91.26	73.00
MC	59.99	92.23	58.10	74.83	73.97	27.95	60.55	95.62	60.24	69.90	70.95	73.64	100.00	53.89	87.95	97.95	67.28	68.76	30.18	74.58	93.08	71.03
CMC	59.74	93.20	59.20	74.83	79.37	37.22	61.25	96.31	61.38	69.90	77.74	99.82	100.00	53.89	98.21	97.95	67.28	76.00	33.77	75.88	90.84	74.47
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Test																						
Imp. Meth.	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	53.15	90.19	61.42	68.84	71.37	18.87	28.58	97.17	54.52	46.52	56.87	36.67	0.00	73.33	61.20	99.48	65.56	46.98	24.78	81.73	90.60	58.47
EC	56.11	90.28	59.51	69.59	61.78	30.90	33.72	93.31	55.30	57.68	55.93	76.35	0.00	43.33	72.75	97.96	58.89	50.00	12.98	78.37	92.82	59.41
KNNI	55.09	90.85	58.06	70.32	61.80	26.88	32.64	94.70	57.59	57.68	51.30	74.41	0.00	43.33	68.38	97.96	58.89	46.98	18.22	75.24	92.34	58.70
WKNNI	55.09	90.85	57.62	70.32	61.33	26.88	32.64	94.70	57.41	57.68	51.30	73.61	0.00	43.33	74.29	97.96	58.89	46.98	18.22	75.24	92.70	58.91
KMI	53.77	90.42	58.78	69.98	63.21	26.68	33.17	95.62	58.00	57.68	51.11	72.81	0.00	43.33	11.25	97.96	58.89	40.82	30.31	75.86	92.07	56.27
FKMI	54.44	90.28	59.65	69.98	65.68	26.98	33.18	95.62	59.13	57.68	57.04	73.07	0.00	43.33	70.29	97.96	58.89	45.38	30.31	75.24	91.87	59.81
SVMI	55.08	91.13	58.49	70.32	63.58	24.95	32.35	96.31	57.78	59.11	55.56	71.75	0.00	43.33	72.83	97.96	58.89	40.11	30.60	78.78	91.79	59.56
EM	54.43	91.28	56.90	67.50	69.80	17.82	32.91	91.05	52.66	44.82	46.48	66.79	32.92	63.33	72.75	98.71	58.89	47.64	33.27	0.00	89.85	56.66
SVDI	54.11	91.85	57.34	68.58	69.23	20.97	32.63	94.97	55.33	44.82	46.11	74.71	29.35	63.33	72.00	98.71	18.89	49.12	30.00	0.00	90.80	54.90
BPCA	44.54	45.64	44.56	78.99	88.14	56.03	18.69	49.74	50.37	3.75	57.22	49.50	18.12	28.33	73.54	50.84	56.67	35.66	3.26	49.01	87.05	47.13
LLSI	53.76	91.13	61.98	68.92	66.20	31.97	32.07	96.31	54.56	57.68	53.52	74.22	0.00	43.33	59.29	97.96	58.89	39.45	26.77	69.20	90.97	58.49
MC	56.11	89.55	57.33	69.98	66.21	26.98	33.18	95.62	58.56	57.68	56.11	70.90	0.00	43.33	65.13	97.96	58.89	40.11	30.31	75.13	92.90	59.14
CMC	54.76	90.85	58.93	70.32	65.11	28.70	32.36	96.31	57.61	57.68	59.81	62.97	0.00	43.33	69.58	97.96	58.89	49.12	33.57	77.32	90.89	59.81
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 23: Results for Ritio classifier

Imp. Meth.	Training														Test																													
	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean	CLE	WIS	CRX	BRE	AUT	PRT	DER	HOV	WAT	SPO	BAN	HOC	AUD	LUN	HEP	MUS	POS	ECH	SOY	MAM	OZO	Mean
IM	57.87	89.38	68.80	77.62	59.75	33.94	88.57	96.80	61.17	81.24	77.33	0.00	100.00	82.31	94.71	99.98	66.42	71.39	54.22	63.24	73.90	71.36	56.17	89.61	66.03	75.79	54.38	26.67	81.53	96.31	55.70	55.90	63.59	0.00	20.00	60.00	88.75	100.00	55.14	63.65	51.87	62.80	72.35	61.73
EC	57.98	88.84	71.00	76.15	69.62	32.19	88.16	95.70	64.55	66.65	74.57	82.03	43.71	79.88	89.82	99.65	64.69	59.25	51.07	76.12	72.23	71.61	54.73	88.99	69.10	72.71	58.23	29.88	81.12	95.61	59.32	56.79	67.59	79.60	41.09	34.17	85.83	99.66	48.89	53.79	49.56	75.65	71.78	65.43
KNNI	57.35	88.94	69.04	76.11	68.83	32.45	88.04	94.26	63.06	64.18	76.32	81.85	41.84	79.19	87.74	99.77	65.31	56.82	47.67	53.88	70.98	69.70	54.40	88.84	66.49	73.08	58.57	30.30	81.12	93.54	58.74	55.71	65.56	77.41	38.91	27.50	81.21	99.68	46.67	50.66	45.62	53.80	70.21	62.76
WKNNI	57.39	88.94	68.63	76.11	68.51	32.45	88.04	94.26	63.52	64.18	76.71	81.82	41.84	79.19	86.67	99.77	65.31	56.82	47.67	53.88	71.32	69.67	54.73	88.84	66.20	73.08	57.64	30.30	81.12	93.54	58.74	55.71	66.85	76.06	38.91	27.50	82.54	99.68	46.67	50.66	45.62	53.80	70.68	62.79
KMI	57.83	88.84	68.26	76.22	68.61	32.10	88.04	95.88	63.41	64.18	76.71	81.52	42.63	78.84	17.34	99.74	65.31	57.33	49.59	53.88	73.26	66.64	54.40	88.84	65.62	72.72	58.57	30.84	81.12	94.93	58.37	56.96	65.19	77.94	39.37	30.83	15.00	99.77	46.67	48.41	47.59	53.80	72.14	59.97
FKMI	57.72	89.03	69.42	76.22	70.30	32.10	88.04	95.88	62.51	65.05	74.73	81.52	42.63	78.84	88.02	99.74	65.31	57.16	49.59	53.50	76.14	70.16	55.40	88.84	67.94	72.72	60.45	30.54	81.12	94.69	57.80	55.71	70.19	80.68	39.37	30.83	81.92	99.77	46.67	48.35	47.59	52.76	74.86	63.72
SVMII	57.57	88.90	70.25	76.22	73.64	29.76	88.16	94.49	66.75	67.38	78.29	81.40	42.29	80.22	93.26	99.77	65.31	59.85	51.54	71.37	77.29	72.08	54.40	89.13	67.36	72.72	63.76	25.07	81.40	94.46	59.88	58.04	70.00	77.41	39.74	27.50	83.79	99.79	46.67	52.91	48.90	69.84	75.34	64.67
EM	57.83	89.05	71.42	76.42	69.00	17.27	88.01	92.55	59.97	64.02	76.98	68.72	44.19	80.57	87.03	99.90	65.31	59.60	51.21	0.00	69.25	66.11	55.40	88.99	69.67	71.65	60.14	16.31	81.40	91.25	53.40	54.46	68.52	70.29	43.44	56.67	85.17	99.79	46.67	55.27	49.88	0.00	68.39	61.27
SVDI	57.87	88.98	70.83	76.73	68.88	19.68	88.04	92.29	58.81	63.72	75.68	69.84	43.06	80.20	88.03	99.90	18.52	58.50	52.12	0.00	69.35	63.86	54.73	88.84	69.39	74.13	60.28	17.46	81.12	92.17	54.54	53.04	66.48	69.47	41.70	53.33	10.00	51.48	50.85	0.00	67.80	58.96		
BPCA	58.01	88.90	70.71	76.19	69.26	31.65	88.07	95.67	64.20	65.05	75.76	81.73	43.37	79.53	89.11	99.65	65.31	57.75	50.20	53.87	72.87	70.33	42.56	53.22	45.14	80.46	74.11	82.72	19.78	51.58	50.95	3.75	54.63	48.12	20.34	28.33	73.54	50.84	56.67	3.26	48.08	62.63	44.62	
LLSI	57.94	88.86	69.13	76.19	68.62	33.00	88.10	96.54	64.55	64.91	75.21	82.06	44.35	79.19	91.61	99.71	64.69	62.20	53.64	48.93	71.26	70.51	55.40	88.70	66.90	72.72	58.08	27.62	81.12	95.62	57.98	56.79	66.11	80.13	41.13	27.50	81.21	99.67	47.78	51.48	46.91	49.53	69.97	62.97
MC	57.98	88.90	70.68	76.22	68.29	32.10	88.04	95.88	63.79	65.05	75.53	81.70	42.63	78.84	87.45	99.74	65.31	60.44	49.59	53.53	73.52	70.25	54.73	88.99	68.23	72.72	54.59	30.54	81.12	94.69	57.60	55.71	68.52	80.95	39.37	30.83	81.88	99.77	46.67	49.12	47.59	52.76	71.08	63.21
CMC	57.90	88.90	70.07	76.22	73.80	36.78	88.40	96.36	67.05	66.95	76.89	99.22	42.58	80.57	93.40	99.74	65.31	58.67	52.52	53.50	77.36	72.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DNI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 24: Results for Rule-6 classifier