

## APPENDIX

Table I contains the raw accuracy results for the 10 fold cross validation. Table II contains the raw accuracy results for the 5x2 fold cross validations.

TABLE I  
THE AVERAGE RAW ACCURACY RESULTS OVER A 10 FOLD CROSS VALIDATION.

Data Set	Boosting 1000	Boosting 50	Random Subspaces	Random Trees B	Bagging	Random Forests-lg	Random Forests-l	Random Forests-2
abalone	23.94	24.42	24.61	24.32	23.32	24.11	24.20	24.61
anneal	99.56	99.67	99.22	99.44	99.33	99.56	99.67	99.67
audiology	83.68	84.57	83.66	83.66	84.57	87.17	81.09	83.70
autos	82.38	82.88	86.29	82.36	82.38	84.33	79.95	80.90
breast-w	96.42	96.13	96.85	96.56	96.27	96.70	96.99	96.56
breast-y	64.61	63.55	73.07	72.03	69.90	72.38	73.77	72.01
bupa	72.76	76.24	67.84	71.90	72.77	73.64	75.65	75.09
car	97.51	97.51	70.54	79.46	94.16	94.16	86.75	94.73
credit-a	87.39	86.96	87.39	85.51	86.23	86.67	87.10	87.39
credit-g	74.70	73.40	75.60	74.10	72.40	75.20	74.50	75.30
crx	86.09	87.10	85.80	86.67	86.09	86.52	87.68	87.54
dna	96.05	95.23	96.33	95.98	95.10	95.92	72.60	83.27
ecoli	86.18	85.86	82.17	86.18	83.11	83.71	86.79	86.17
glass	79.07	77.14	79.00	80.91	76.69	79.05	79.09	82.34
heart-c	78.83	81.81	80.51	81.84	77.24	81.18	80.84	82.18
heart-h	79.97	81.70	84.03	81.66	80.67	81.02	82.00	82.70
heart-s	88.53	87.76	92.69	89.36	88.46	89.29	93.53	91.86
heart-v	71.50	72.50	71.50	76.00	73.50	74.00	76.50	73.50
hepatitis	85.67	81.96	81.17	83.17	83.21	83.75	84.38	85.08
horse-colic	83.69	83.67	83.96	82.34	84.78	85.05	82.33	84.25
hypo	99.11	99.05	98.67	98.86	99.05	99.15	98.70	98.96
ion	94.02	94.02	93.44	93.17	92.60	93.74	93.44	93.73
iris	94.67	94.67	94.00	94.67	94.67	95.33	94.67	94.67
krk	90.15	88.21	42.13	87.21	86.88	87.12	85.22	87.90
krkp	99.59	99.53	96.09	98.78	99.66	99.56	98.19	99.25
labor	93.00	91.33	93.00	96.67	91.33	93.00	96.33	94.67
led-24	73.24	71.22	68.44	72.12	73.14	74.70	74.02	74.86
letter	97.61	96.72	97.05	96.46	94.79	96.77	95.50	96.79
lrs	88.49	88.68	86.60	87.74	86.42	87.92	87.17	88.11
lymph	85.14	87.81	84.48	87.14	81.71	84.43	85.71	85.81
mushroom	100	100	100	100	100	100	100	100
nursery	99.85	99.95	92.99	97.68	99.04	98.97	97.65	99.27
page	97.17	96.93	97.31	97.59	97.30	97.50	97.31	97.55
pendigits	99.52	99.38	99.21	99.22	98.58	99.13	99.03	99.12
phoneme	91.75	91.41	83.66	89.91	91.27	91.38	91.23	91.28
pima	74.07	74.74	74.73	76.03	76.17	76.69	76.55	76.29
primary	42.18	39.83	44.55	41.60	41.60	42.21	42.19	41.31
promoters	88.91	96.36	93.27	88.91	91.73	93.55	86.09	88.91
ringnorm	97.67	95.00	92.67	96.00	92.33	93.33	97.67	94.67
sat	92.60	91.56	92.06	92.29	91.51	91.86	90.97	91.55
segment	98.66	98.48	97.71	97.92	98.10	98.35	97.66	98.14
shuttle	99.99	99.99	99.89	99.97	99.98	99.99	99.96	99.98
sick	99.13	99.02	97.46	98.52	99.10	98.86	97.80	98.70
sonar	84.19	84.19	81.26	88.07	76.98	81.83	81.83	81.88
soybean	94.88	94.00	95.31	93.70	94.00	94.88	93.26	94.58
soybean-small	97.5	91.5	91.5	100	100	100	100	100
splice	95.77	95.30	96.61	95.14	94.70	96.93	76.87	88.84
threenorm	86.33	84.67	83.00	84.67	83.67	85.00	87.33	86.67
tic-tac-toe	98.75	98.96	73.17	89.67	96.24	96.87	88.32	96.24
twonorm	93.67	93.33	94.00	95.67	94.00	95.00	96.67	95.67
vehicle	77.53	76.00	75.28	73.62	74.57	73.63	73.04	74.57
vote	95.17	95.87	95.18	94.94	95.62	95.87	95.87	95.87
vote1	87.58	88.26	87.80	90.57	89.87	88.04	90.12	89.41
vowel	97.17	95.83	96.03	98.11	92.06	96.60	97.74	97.36
waveform	85.08	84.26	85.00	85.70	84.10	84.96	85.44	85.42
yeast	59.36	60.04	55.19	61.59	61.25	61.32	62.40	62.54
zip	96.42	97.02	96.39	96.97	93.79	96.87	95.64	96.30

TABLE II  
THE AVERAGE RAW ACCURACY RESULTS OVER 5X2 FOLD CROSS VALIDATIONS.

Data Set	Boosting 1000	Boosting 50	Random Subspaces	Random Trees B	Bagging	Random Forests-lg	Random Forests-1	Random Forests-2
abalone	24.49	23.72	23.99	23.79	23.97	24.36	24.57	24.39
anneal	99.15	99.06	98.80	99.02	98.78	99.13	98.95	99.33
audiology	80.71	80.88	78.76	79.03	80.88	82.30	73.10	78.76
autos	75.71	74.73	76.68	72.29	75.71	76.68	73.56	76.19
bupa	69.45	69.74	64.87	65.51	70.96	70.50	71.31	71.25
breast-w	96.31	96.11	96.74	96.82	95.99	96.28	97.00	96.65
breast-y	66.71	66.36	71.82	71.05	69.37	70.07	71.54	71.19
car	95.56	95.08	71.44	83.28	91.98	92.36	83.29	92.60
credit-a	86.23	85.01	85.91	85.80	85.57	86.29	86.72	87.07
credit-g	74.50	74.16	73.72	73.10	72.86	74.54	72.90	73.62
crx	86.26	86.14	85.97	85.36	85.77	86.41	86.29	86.52
dna	95.54	94.66	95.37	95.17	94.66	95.05	70.41	81.10
ecoli	85.35	84.74	81.66	84.86	83.63	84.06	85.97	86.03
glass	74.39	72.80	73.18	73.83	73.46	72.71	74.39	74.67
heart-c	80.46	79.60	80.52	81.72	77.75	80.72	81.45	81.65
heart-h	80.95	80.27	82.79	80.00	80.20	80.95	81.63	81.43
heart-s	89.76	89.76	92.19	91.55	90.89	92.03	93.33	93.01
heart-v	70.90	70.40	72.20	73.20	71.20	72.60	75.50	74.20
hepatitis	85.42	85.04	83.47	84.90	82.58	84.13	84.51	85.80
horse-colic	82.66	81.90	82.07	82.50	83.04	83.59	82.01	82.61
hypo	99.03	99.00	98.72	98.75	98.95	98.98	98.64	98.80
ion	93.85	93.11	92.99	92.37	92.65	93.05	92.71	93.11
iris	93.87	93.87	93.73	93.47	93.87	93.60	93.60	93.47
krk	82.27	79.80	41.93	79.21	78.87	79.30	77.31	80.08
krkp	99.27	99.34	95.21	98.04	99.11	99.29	96.91	98.80
labor	88.44	89.14	91.22	94.75	91.22	92.28	93.69	93.34
led-24	72.98	71.29	68.87	71.56	72.65	74.42	73.73	74.65
letter	96.10	94.84	95.69	94.98	92.80	95.41	93.72	95.37
lrs	87.92	87.06	85.62	87.51	86.19	87.47	86.79	86.94
lymph	82.30	82.03	80.27	84.73	79.05	82.30	82.70	83.51
mushroom	100	100	100	100	100	100	100	100
nursery	99.24	98.87	92.88	96.24	97.53	97.52	96.28	98.15
page	96.80	96.72	96.85	97.14	97.01	97.14	96.89	97.07
pendigits	99.29	99.06	98.97	99.07	98.08	98.87	98.75	98.88
phoneme	89.61	88.99	82.55	87.89	88.87	89.00	89.09	89.17
pima	74.92	74.11	72.58	75.34	76.04	76.12	75.60	76.48
primary	40.65	38.06	43.60	40.53	39.30	40.18	40.71	40.83
promoters	91.70	88.68	83.96	90.94	84.91	91.51	83.77	88.30
ringnorm	94.73	93.73	90.80	94.20	88.80	91.40	97.00	94.87
sat	91.47	90.56	91.09	91.25	90.03	90.97	90.15	90.62
segment	98.26	97.73	97.03	97.48	96.64	97.58	96.83	97.32
shuttle	99.98	99.98	99.88	99.95	99.96	99.98	99.94	99.96
sick	98.69	98.65	97.08	98.08	98.59	98.64	97.13	98.13
sonar	79.33	77.12	78.17	82.12	75.96	80.29	80.00	80.00
soybean	93.50	92.71	94.32	93.44	92.39	93.53	92.03	93.47
soybean-small	97.01	97.01	99.15	100	97.45	99.57	100	100
splice	95.70	94.73	96.35	94.51	94.21	96.65	74.27	87.19
tic-tac-toe	98.16	96.70	72.65	85.47	90.58	92.80	84.32	90.40
threanorm	85.67	81.27	79.13	82.93	80.93	83.07	85.73	84.87
twonorm	95.07	93.13	88.67	94.27	88.40	92.27	95.67	94.73
vehicle	77.26	75.13	74.78	75.04	74.16	74.52	73.59	74.04
vote	94.76	94.67	95.04	94.35	94.67	95.63	94.71	95.54
vote1	88.74	88.78	91.17	90.12	87.68	89.15	90.53	90.25
vowel	91.67	87.88	88.94	93.52	85.19	88.79	92.05	91.78
waveform	84.71	83.34	84.79	85.32	83.36	84.54	85.25	85.35
yeast	58.34	56.36	53.68	59.04	58.84	59.26	60.28	59.99
zip	96.25	95.28	95.18	96.31	92.79	96.11	94.75	95.48