

## Full Performance Scores

### Full Scores from Unseen Testing Dataset

Score (%)	Run	Recreated RNN	Optimised CRNN	Optimised CNN	Hard Voting CRNN	Soft Voting CRNN	Hard Voting CNN	Soft Voting CNN
Accuracy	1	87.93	93.27	94.19	94.46	94.68	94.49	94.56
	2	87.31	93.13	93.02	93.98	94.12	94.71	94.78
	3	88.08	92.92	92.79	93.92	94.12	94.67	94.78
	4	88.46	93.32	93.72	93.94	94.11	94.60	94.60
	5	87.78	93.78	92.08	94.16	94.31	94.75	94.86
	6	85.93	92.76	92.09	93.98	94.18	94.52	94.58
	7	85.57	92.21	92.28	93.70	93.84	94.79	94.86
	8	85.98	91.82	93.91	93.49	93.69	94.98	95.15
	9	88.46	92.06	92.98	93.83	93.98	94.35	94.40
	10	85.97	93.20	92.51	94.01	94.15	94.68	94.68
Precision	1	84.61	91.89	92.49	91.54	92.12	92.60	93.20
	2	83.70	91.96	92.71	91.37	92.02	92.93	93.51
	3	85.15	91.09	89.90	90.59	91.33	92.33	92.89
	4	85.97	91.79	90.92	91.15	91.81	92.97	93.42
	5	84.55	92.23	90.05	91.84	92.46	93.03	93.57
	6	80.89	92.20	91.36	91.22	91.87	92.47	92.95
	7	82.12	90.93	91.69	90.85	91.40	92.61	93.13
	8	83.76	89.44	92.12	90.41	91.10	92.79	93.34
	9	85.04	90.01	91.41	91.56	92.15	92.65	93.15
	10	84.07	93.66	90.94	91.48	92.08	92.68	93.17
Recall	1	92.72	94.93	96.18	97.98	97.70	96.71	96.12
	2	92.66	94.52	93.38	97.12	96.63	96.78	96.24
	3	92.24	95.15	96.41	98.02	97.50	97.44	96.98
	4	91.92	95.15	97.14	97.34	96.87	96.49	95.96
	5	92.47	95.62	94.61	96.94	96.48	96.76	96.33
	6	94.09	93.41	92.97	97.33	96.94	96.94	96.47
	7	90.94	93.77	92.99	97.19	96.79	97.33	96.88
	8	89.27	94.84	96.03	97.30	96.84	97.55	97.25
	9	93.33	94.61	94.88	96.56	96.15	96.33	95.85
	10	88.75	92.66	94.43	97.06	96.62	97.02	96.44
F-score	1	88.48	93.38	94.30	94.65	94.83	94.61	94.64
	2	87.95	93.23	93.04	94.16	94.27	94.82	94.86
	3	88.55	93.08	93.04	94.16	94.32	94.82	94.89
	4	88.85	93.44	93.92	94.14	94.27	94.70	94.67
	5	88.33	93.89	92.28	94.32	94.43	94.86	94.93
	6	86.99	92.80	92.16	94.17	94.33	94.65	94.68
	7	86.31	92.33	92.33	93.91	94.02	94.91	94.96
	8	86.43	92.06	94.03	93.73	93.88	95.11	95.25
	9	88.99	92.25	93.11	93.99	94.11	94.46	94.48
	10	86.35	93.16	92.65	94.18	94.29	94.80	94.77

**Full Scores from Real-World Unseen Testing Dataset**

Score (%)	Run	Hard Voting CNN	Soft Voting CNN
Accuracy	1	89.56	90.29
	2	89.01	90.48
	3	93.41	93.59
	4	90.29	91.39
	5	90.48	91.58
	6	88.83	90.66
	7	90.29	91.76
	8	87.91	89.74
	9	88.46	89.93
	10	90.11	91.03
Precision	1	82.93	84.16
	2	82.57	84.42
	3	88.35	88.89
	4	84.38	85.99
	5	84.21	86.03
	6	82.72	85.35
	7	83.95	85.85
	8	80.71	82.98
	9	81.25	83.23
	10	83.49	84.78
Recall	1	99.63	99.27
	2	98.90	99.27
	3	100.00	99.63
	4	98.90	98.90
	5	99.63	99.27
	6	98.17	98.17
	7	99.63	100.00
	8	99.63	100.00
	9	100.00	100.00
	10	100.00	100.00
F-score	1	90.52	91.09
	2	90.00	91.25
	3	93.81	93.96
	4	91.06	91.99
	5	91.28	92.18
	6	89.78	91.31
	7	91.12	92.39
	8	89.18	90.70
	9	89.66	90.85
	10	91.00	91.76

**Full Scores from Pitch Shifting Study using the Optimised CNN Model**

Score (%)	Run	Original Dataset	Dataset with Pitch Shift
Accuracy	1	81.26	82.81
	2	84.24	77.85
	3	77.90	81.49
	4	80.55	79.13
	5	77.51	76.10
	6	79.51	82.07
	7	78.96	80.44
	8	84.98	78.37
	9	79.45	78.21
	10	80.48	77.72
Precision	1	77.94	80.58
	2	80.97	72.32
	3	72.30	78.71
	4	73.90	74.06
	5	72.61	70.31
	6	77.80	76.88
	7	77.30	76.88
	8	79.65	72.31
	9	73.88	72.43
	10	76.39	72.39
Recall	1	87.21	86.46
	2	89.51	90.23
	3	90.47	86.32
	4	94.47	89.67
	5	88.34	90.35
	6	82.58	91.73
	7	81.99	87.07
	8	93.96	91.97
	9	91.10	91.08
	10	88.22	89.63
F-score	1	82.32	83.42
	2	85.03	80.29
	3	80.37	82.34
	4	82.93	81.12
	5	79.70	79.08
	6	80.12	83.65
	7	79.58	81.66
	8	86.21	80.96
	9	81.59	80.69
	10	81.88	80.09