

Supplementary Materials: Advanced Analysis of 3D Kinect Data: Supervised Classification of Facial Nerve Function via Parallel Convolutional Neural Networks

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Supplementary Material

Table S1. F1-Score of TPCNN.

HB by a Clinician	Val set 1 [%]	Val set 2 [%]	Val set 3 [%]	Val set 4 [%]	Val set 5 [%]
1	89.07	87.87	89.43	86.82	88.37
2	86.95	75.00	80.00	85.71	78.26
3	84.44	76.92	79.06	79.99	88.37
4	71.42	85.71	92.30	92.30	76.92
5	85.71	83.33	100.00	83.33	72.72
6	93.75	78.78	75.67	62.06	71.42

Table S2. F1-Score of CNN-LSTM.

HB by a Clinician	Val set 1 [%]	Val set 2 [%]	Val set 3 [%]	Val set 4 [%]	Val set 5 [%]
1	0	88.28	75.43	84	78.84
2	16.94	70.83	64	69.38	72
3	21.27	80.95	78.94	81.81	77.55
4	40	82.35	75	76.92	55.55
5	38.36	66.66	66.66	83.33	53.33
6	39.21	64.70	64.70	48.48	58.82

Table S3. F1-Score of ResNet.

HB by a Clinician	Val set 1 [%]	Val set 2 [%]	Val set 3 [%]	Val set 4 [%]	Val set 5 [%]
1	0	0	0	0	0
2	24.24	29.41	29.16	18.75	18.75
3	31.57	41.66	38.29	32.43	32.43
4	48	26.41	24.24	19.60	19.60
5	20.40	50	32.43	16.66	16.66
6	36.36	26.41	37.20	28.57	28.57

Table S4. F1-Score of LSTM.

HB by a Clinician	Val set 1 [%]	Val set 2 [%]	Val set 3 [%]	Val set 4 [%]	Val set 5 [%]
1	0	0	0	0	0
2	0	21.42	25	0	20.68
3	7.40	22.22	25	0	18.18
4	18.46	21.87	30	13.33	16
5	18.18	11.11	24.99	14.81	14.28
6	25.53	26.41	28.57	20.68	25

Table S5. F1-Score of FCN.

HB by a Clinician	Val set 1 [%]	Val set 2 [%]	Val set 3 [%]	Val set 4 [%]	Val set 5 [%]
1	0	0	0	0	0
2	6	0	15.38	7.14	6.8
3	7.40	0	7.14	20.33	11.42
4	22.72	0	16.66	15.62	22.22
5	11.94	11.11	14.63	20	9.63
6	22.22	22.85	20.68	14.81	23.52