## df\_alzheimer

**MLP:**

precision recall f1-score support

0 0.00 0.00 0.00 4

1 0.92 0.93 0.92 171

2 0.57 0.61 0.59 33

3 0.00 0.00 0.00 1

micro avg 0.86 0.86 0.86 209

macro avg 0.37 0.38 0.38 209

weighted avg 0.84 0.86 0.85 209

**LSTM:**

precision recall f1-score support

0 0.00 0.00 0.00 4

1 0.88 0.98 0.93 171

2 0.78 0.42 0.55 33

3 0.00 0.00 0.00 1

micro avg 0.87 0.87 0.87 209

macro avg 0.42 0.35 0.37 209

weighted avg 0.85 0.87 0.85 209

**BiLSTM:**

precision recall f1-score support

0 1.00 0.25 0.40 4

1 0.91 0.93 0.92 171

2 0.61 0.61 0.61 33

3 0.00 0.00 0.00 1

micro avg 0.86 0.86 0.86 209

macro avg 0.63 0.45 0.48 209

weighted avg 0.86 0.86 0.86 209

**CNN:**

precision recall f1-score support

0 0.00 0.00 0.00 4

1 0.93 0.91 0.92 171

2 0.53 0.70 0.61 33

3 0.00 0.00 0.00 1

micro avg 0.85 0.85 0.85 209

macro avg 0.37 0.40 0.38 209

weighted avg 0.85 0.85 0.85 209

**Char-LSTM:**

precision recall f1-score support

0 0.00 0.00 0.00 4

1 0.91 0.88 0.90 171

2 0.52 0.67 0.59 33

3 0.00 0.00 0.00 1

micro avg 0.83 0.83 0.83 209

macro avg 0.36 0.39 0.37 209

weighted avg 0.83 0.83 0.83 209

**Char-CNN:**

*class\_weight={0:20,1:1,2:1,3:20}*

precision recall f1-score support

0 1.00 0.25 0.40 4

1 0.88 0.94 0.91 171

2 0.58 0.42 0.49 33

3 0.00 0.00 0.00 1

micro avg 0.84 0.84 0.84 209

macro avg 0.62 0.40 0.45 209

weighted avg 0.83 0.84 0.83 209

## df\_cancer

**MLP:**

precision recall f1-score support

0 0.32 0.36 0.34 25

1 0.83 0.83 0.83 121

2 0.42 0.41 0.41 32

3 0.00 0.00 0.00 5

micro avg 0.67 0.67 0.67 183

macro avg 0.39 0.40 0.40 183

weighted avg 0.67 0.67 0.67 183

**LSTM:**

precision recall f1-score support

0 0.43 0.12 0.19 25

1 0.77 0.91 0.84 121

2 0.65 0.53 0.59 32

3 0.25 0.40 0.31 5

micro avg 0.72 0.72 0.72 183

macro avg 0.53 0.49 0.48 183

weighted avg 0.69 0.72 0.69 183

**BiLSTM:**

precision recall f1-score support

0 0.50 0.32 0.39 25

1 0.82 0.88 0.85 121

2 0.55 0.56 0.55 32

3 0.25 0.20 0.22 5

micro avg 0.73 0.73 0.73 183

macro avg 0.53 0.49 0.50 183

weighted avg 0.71 0.73 0.72 183

**CNN:**

precision recall f1-score support

0 0.33 0.08 0.13 25

1 0.73 0.94 0.82 121

2 0.56 0.31 0.40 32

3 0.50 0.20 0.29 5

micro avg 0.69 0.69 0.69 183

macro avg 0.53 0.38 0.41 183

weighted avg 0.64 0.69 0.64 183

**Char-LSTM:**

precision recall f1-score support

0 0.41 0.56 0.47 25

1 0.88 0.70 0.78 121

2 0.34 0.53 0.41 32

3 0.50 0.20 0.29 5

micro avg 0.64 0.64 0.64 183

macro avg 0.53 0.50 0.49 183

weighted avg 0.71 0.64 0.66 183

**Char-CNN:**

*class\_weight={0:2,1:1,2:1,3:20}*

precision recall f1-score support

0 0.39 0.28 0.33 25

1 0.76 0.89 0.82 121

2 0.48 0.31 0.38 32

3 0.50 0.20 0.29 5

micro avg 0.69 0.69 0.69 183

macro avg 0.53 0.42 0.45 183

weighted avg 0.65 0.69 0.66 183

## df\_depression

**MLP:**

precision recall f1-score support

0 0.40 0.19 0.26 21

1 0.63 0.67 0.65 83

2 0.00 0.00 0.00 5

3 0.47 0.51 0.49 59

micro avg 0.54 0.54 0.54 168

macro avg 0.37 0.34 0.35 168

weighted avg 0.53 0.54 0.53 168

**LSTM:**

precision recall f1-score support

0 1.00 0.24 0.38 21

1 0.67 0.63 0.65 83

2 0.00 0.00 0.00 5

3 0.51 0.71 0.59 59

micro avg 0.59 0.59 0.59 168

macro avg 0.54 0.39 0.41 168

weighted avg 0.63 0.59 0.57 168

**BILSTM:**

precision recall f1-score support

0 0.67 0.29 0.40 21

1 0.65 0.66 0.65 83

2 0.00 0.00 0.00 5

3 0.54 0.66 0.60 59

micro avg 0.60 0.60 0.60 168

macro avg 0.46 0.40 0.41 168

weighted avg 0.59 0.60 0.58 168

**CNN:**

precision recall f1-score support

0 0.86 0.29 0.43 21

1 0.62 0.71 0.66 83

2 0.00 0.00 0.00 5

3 0.55 0.59 0.57 59

micro avg 0.60 0.60 0.60 168

macro avg 0.51 0.40 0.42 168

weighted avg 0.61 0.60 0.58 168

**Char-LSTM:**

precision recall f1-score support

0 0.50 0.33 0.40 21

1 0.65 0.63 0.64 83

2 0.00 0.00 0.00 5

3 0.49 0.61 0.55 59

micro avg 0.57 0.57 0.57 168

macro avg 0.41 0.39 0.40 168

weighted avg 0.56 0.57 0.56 168

**Char-CNN:**

precision recall f1-score support

0 0.36 0.38 0.37 21

1 0.74 0.51 0.60 83

2 0.00 0.00 0.00 5

3 0.52 0.76 0.62 59

micro avg 0.57 0.57 0.57 168

macro avg 0.41 0.41 0.40 168

weighted avg 0.59 0.57 0.56 168

## df\_heart\_attack

**MLP:**

precision recall f1-score support

0 0.89 0.79 0.84 110

1 0.82 0.74 0.78 31

2 0.48 0.69 0.56 16

3 0.14 0.33 0.20 6

micro avg 0.75 0.75 0.75 163

macro avg 0.58 0.64 0.60 163

weighted avg 0.81 0.75 0.78 163

**LSTM:**

precision recall f1-score support

0 0.91 0.67 0.77 110

1 0.79 0.84 0.81 31

2 0.38 0.69 0.49 16

3 0.15 0.50 0.23 6

micro avg 0.70 0.70 0.70 163

macro avg 0.56 0.67 0.58 163

weighted avg 0.81 0.70 0.73 163

**BiLSTM:**

precision recall f1-score support

0 0.87 0.80 0.83 110

1 0.84 0.87 0.86 31

2 0.50 0.44 0.47 16

3 0.12 0.33 0.18 6

micro avg 0.76 0.76 0.76 163

macro avg 0.59 0.61 0.58 163

weighted avg 0.80 0.76 0.78 163

**CNN:**

precision recall f1-score support

0 0.81 0.91 0.86 110

1 0.87 0.84 0.85 31

2 1.00 0.06 0.12 16

3 0.00 0.00 0.00 6

micro avg 0.78 0.78 0.78 163

macro avg 0.67 0.45 0.46 163

weighted avg 0.81 0.78 0.75 163

**Char-LSTM:**

precision recall f1-score support

0 0.83 0.95 0.89 110

1 0.83 0.77 0.80 31

2 1.00 0.19 0.32 16

3 0.00 0.00 0.00 6

micro avg 0.81 0.81 0.81 163

macro avg 0.66 0.48 0.50 163

weighted avg 0.81 0.81 0.78 163

**Char-CNN:**

precision recall f1-score support

0 0.81 0.89 0.85 110

1 0.95 0.65 0.77 31

2 0.33 0.19 0.24 16

3 0.00 0.00 0.00 6

micro avg 0.74 0.74 0.74 163

macro avg 0.52 0.43 0.46 163

weighted avg 0.76 0.74 0.74 163

## df\_parkinson

**MLP:**

precision recall f1-score support

0 0.76 0.68 0.71 37

1 0.86 0.91 0.88 106

2 0.64 0.54 0.58 13

3 0.50 0.67 0.57 3

micro avg 0.82 0.82 0.82 159

macro avg 0.69 0.70 0.69 159

weighted avg 0.81 0.82 0.81 159

**LSTM:**

precision recall f1-score support

0 0.81 0.68 0.74 37

1 0.85 0.92 0.89 106

2 0.80 0.62 0.70 13

3 0.67 0.67 0.67 3

micro avg 0.84 0.84 0.84 159

macro avg 0.78 0.72 0.75 159

weighted avg 0.83 0.84 0.83 159

**Bi-lstm:**

precision recall f1-score support

0 0.86 0.81 0.83 37

1 0.87 0.94 0.90 106

2 0.71 0.38 0.50 13

3 1.00 0.67 0.80 3

micro avg 0.86 0.86 0.86 159

macro avg 0.86 0.70 0.76 159

weighted avg 0.86 0.86 0.85 159

**CNN:**

precision recall f1-score support

0 0.85 0.76 0.80 37

1 0.84 0.97 0.90 106

2 1.00 0.15 0.27 13

3 1.00 0.33 0.50 3

micro avg 0.84 0.84 0.84 159

macro avg 0.92 0.55 0.62 159

weighted avg 0.86 0.84 0.82 159

**Char-LSTM:**

precision recall f1-score support

0 0.77 0.81 0.79 37

1 0.87 0.90 0.88 106

2 0.56 0.38 0.45 13

3 1.00 0.67 0.80 3

micro avg 0.83 0.83 0.83 159

macro avg 0.80 0.69 0.73 159

weighted avg 0.82 0.83 0.83 159

**Char-CNN:**

precision recall f1-score support

0 0.87 0.54 0.67 37

1 0.84 0.96 0.90 106

2 0.57 0.62 0.59 13

3 1.00 0.33 0.50 3

micro avg 0.82 0.82 0.82 159

macro avg 0.82 0.61 0.66 159

weighted avg 0.83 0.82 0.81 159

## df\_stroke

**MLP:**

precision recall f1-score support

0 0.81 0.85 0.83 98

1 0.77 0.70 0.73 53

2 0.64 0.70 0.67 23

3 0.00 0.00 0.00 4

micro avg 0.76 0.76 0.76 178

macro avg 0.55 0.56 0.56 178

weighted avg 0.76 0.76 0.76 178

**LSTM:**

precision recall f1-score support

0 0.81 0.81 0.81 98

1 0.82 0.70 0.76 53

2 0.52 0.65 0.58 23

3 0.17 0.25 0.20 4

micro avg 0.74 0.74 0.74 178

macro avg 0.58 0.60 0.58 178

weighted avg 0.76 0.74 0.75 178

**BiLSTM:**

precision recall f1-score support

0 0.84 0.80 0.82 98

1 0.87 0.62 0.73 53

2 0.50 0.91 0.65 23

3 0.20 0.25 0.22 4

micro avg 0.75 0.75 0.75 178

macro avg 0.60 0.65 0.60 178

weighted avg 0.79 0.75 0.75 178

**CNN:**

precision recall f1-score support

0 0.72 0.91 0.81 98

1 0.78 0.60 0.68 53

2 0.50 0.30 0.38 23

3 0.00 0.00 0.00 4

micro avg 0.72 0.72 0.72 178

macro avg 0.50 0.45 0.47 178

weighted avg 0.70 0.72 0.70 178

**Char-LSTM:**

precision recall f1-score support

0 0.80 0.87 0.83 98

1 0.76 0.72 0.74 53

2 0.73 0.70 0.71 23

3 0.00 0.00 0.00 4

micro avg 0.78 0.78 0.78 178

macro avg 0.57 0.57 0.57 178

weighted avg 0.76 0.78 0.77 178

**Char-CNN:**

precision recall f1-score support

0 0.75 0.93 0.83 98

1 0.82 0.70 0.76 53

2 0.64 0.30 0.41 23

3 0.00 0.00 0.00 4

micro avg 0.76 0.76 0.76 178

macro avg 0.55 0.48 0.50 178

weighted avg 0.74 0.76 0.73 178