MLP

After balancing

Train

[[500 0 0]

[ 0 580 0]

[183 99 339]]

0.8342151675485009

Test

[[ 29 0 4]

[ 0 8 2]

[ 62 32 113]]

0.6

Before balancing

Train

[[ 43 0 57]

[ 0 17 12]

[ 28 5 588]]

0.864

Test

[[ 9 0 24]

[ 0 3 7]

[ 17 7 183]]

0.78

Random forest

After balancing

Train

[[420 20 60]

[ 0 580 0]

[159 124 338]]

0.7865961199294532

Test

[[ 28 2 3]

[ 0 10 0]

[ 45 40 122]]

0.64

Before balancing

Train

[[ 0 0 100]

[ 0 0 29]

[ 0 0 621]]

0.828

Test

[[ 0 0 33]

[ 0 0 10]

[ 0 0 207]]

0.828

Custom NN using Keras

After balancing

Train

[[495 0 5]

[ 0 580 0]

[170 75 376]]

0.8530276308054086

Test

[[ 28 0 5]

[ 0 7 3]

[ 63 25 119]]

0.616

Before balancing

Train

[[ 0 0 100]

[ 0 0 29]

[ 0 0 621]]

0.828

Test

[[ 0 0 33]

[ 0 0 10]

[ 0 0 207]]

0.828