Neural network for recognition of covid patients by photo

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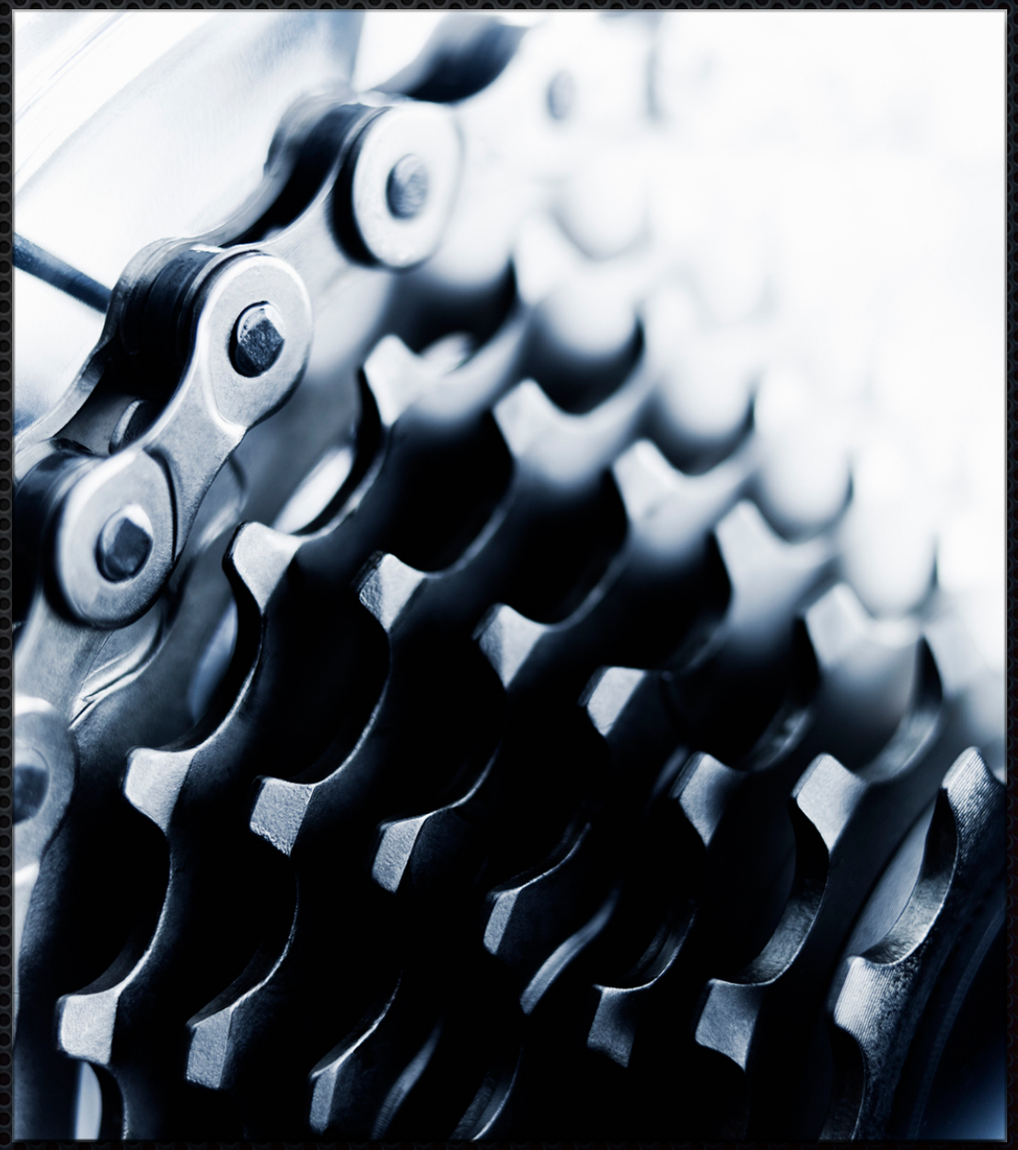
Production stages

- Make model
- Collecting Datasets
- Change Hyperparameters
- Conclusion



Model

- L-hiden layer NN
- L-1 layers with RELU activation function
- Last layer make binary classification infected/ uninfected

Data collection

- There was not enough data in free sources
- Used cat / non cat data set

Best hyperparameters

- Best = productivity / computing costs rate
- 4 layer network with 12288, 20, 7, 5, 1 nodes
- Number of Iterations 2500
- Learning rate 0.0075

Conclusion

- Make more than 4 hidden layers overfitting model
- Learning rate less than 0.0075 need very much iterations
- Model prediction rate 80%