

# Homework #3

To be submitted:

1. Implement optimization methods:  
[https://github.com/omriallouche/ydata\\_deep\\_learning\\_2021/blob/main/assignments/optimization\\_methods/Optimization%20methods.ipynb](https://github.com/omriallouche/ydata_deep_learning_2021/blob/main/assignments/optimization_methods/Optimization%20methods.ipynb)
2. Build a convolutional network:  
[https://github.com/omriallouche/ydata\\_deep\\_learning\\_2021/blob/master/assignments/cnn\\_step\\_by\\_step/Convolution%20model%20-%20Step%20by%20Step%20-%20v1.ipynb](https://github.com/omriallouche/ydata_deep_learning_2021/blob/master/assignments/cnn_step_by_step/Convolution%20model%20-%20Step%20by%20Step%20-%20v1.ipynb)

Suggested reading:

1. **Cross entropy loss and softmax:** In depth overview -  
<http://neuralnetworksanddeeplearning.com/chap3.html>
2. For you Math lovers - why **momentum** actually works:  
<https://distill.pub/2017/momentum/>