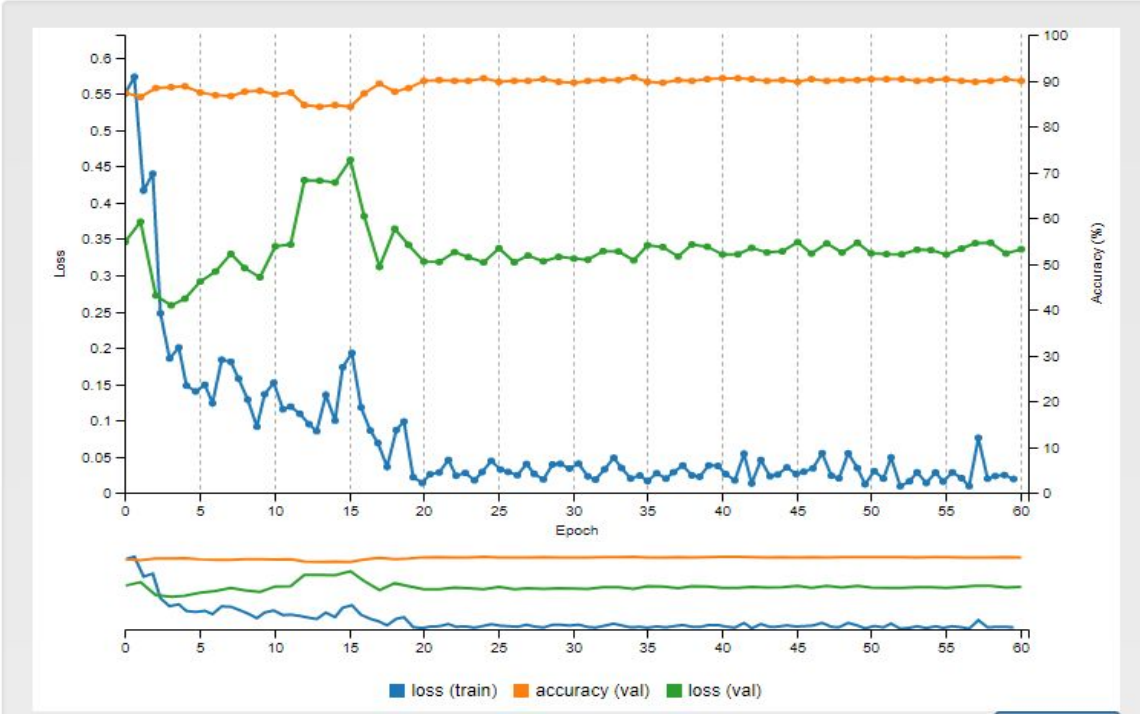
Лабораторная работа # 6

Ширяева Ольга

Image samples

1. Using pretrained model

Training and validation loss + accuracy graph



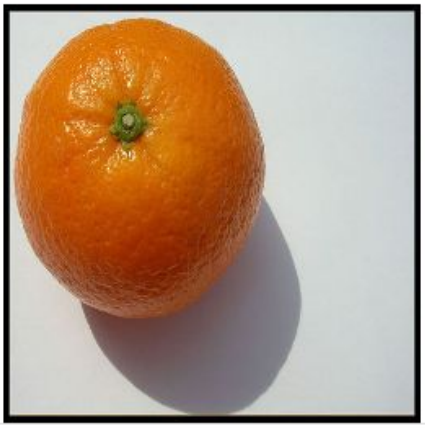
Examples of recognition, filter visualization

Shiryaeva_Lemon_orange_caffemodel_Pretrain

Image Classification Model

Predictions

lemon	100.0%
orange	0.0%



Predictions

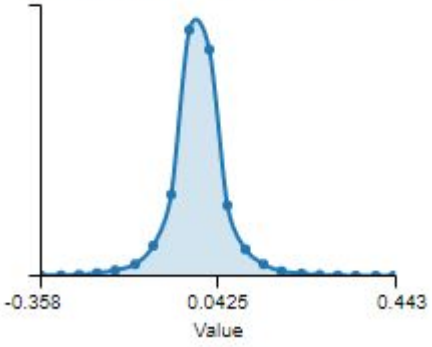
orange	100.0%
lemon	0.0%

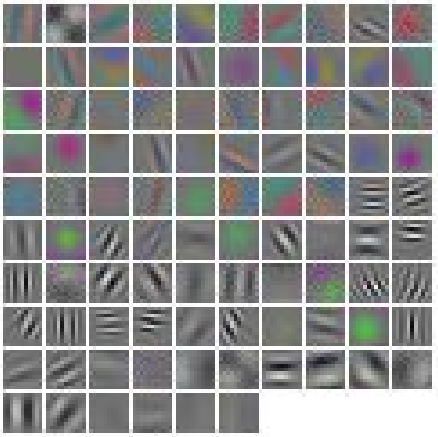
conv1

Weights *(Convolution layer)*

34,944 learned parameters

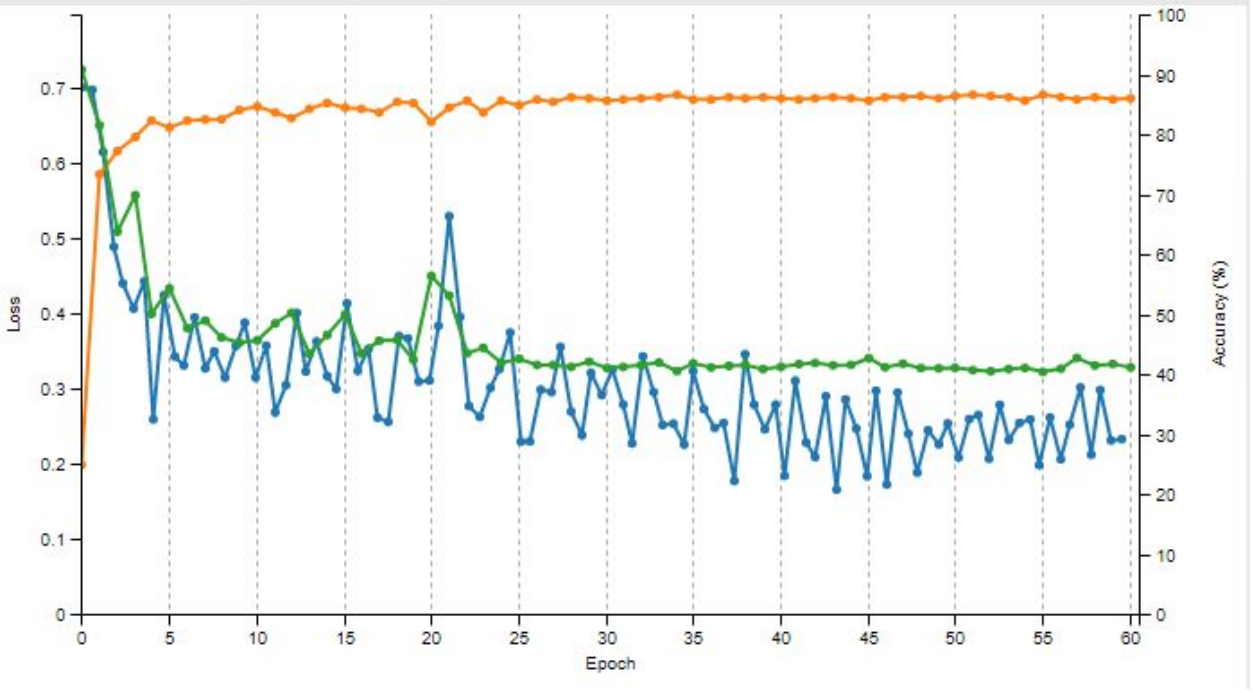
Data shape: [96 3 11 11]
Mean: 0.00014166207
Std deviation: 0.058591712



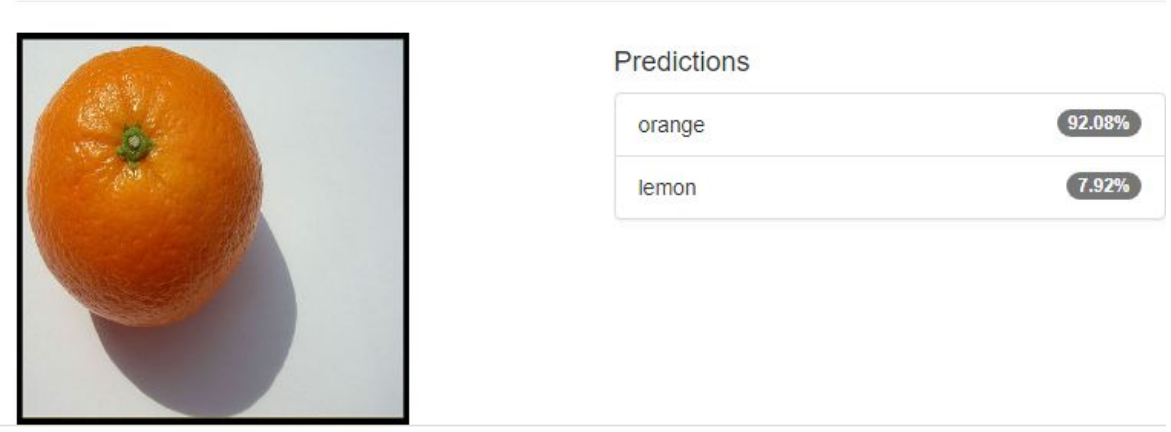


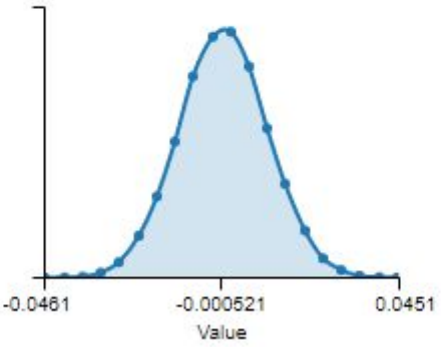
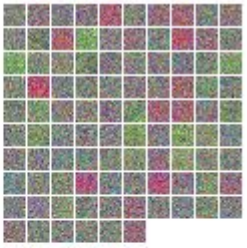
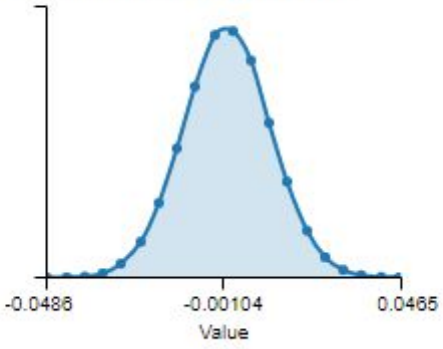
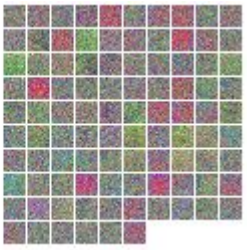
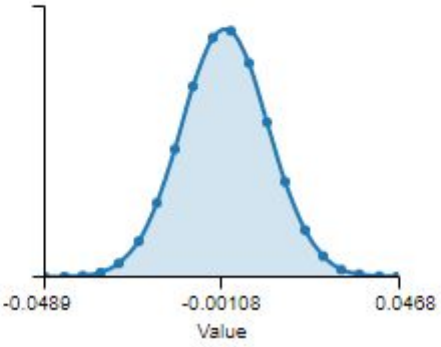
2. Training model from scratch

Training and validation loss + accuracy graph



Examples of recognition, filter visualization



Epoch	Layers	Lemon classification prediction
#Epoch10	conv1 Weights *(Convolution layer)* 34,944 learned parameters **Data shape:** [96 3 11 11] **Mean:** -3.1600583e-05 **Std deviation:** 0.010883021  	**Lemon 99.04%** **Orange 0.96%**
#Epoch20	conv1 Weights *(Convolution layer)* 34,944 learned parameters **Data shape:** [96 3 11 11] **Mean:** -8.882596e-05 **Std deviation:** 0.011174975  	**Lemon % 99.86** **Orange % 0.14**
#Epoch60	conv1 Weights *(Convolution layer)* 34,944 learned parameters **Data shape:** [96 3 11 11] **Mean:** -9.6068594e-05 **Std deviation:** 0.011254986  	**Lemon 99.9 %** **Orange 0.01 %**