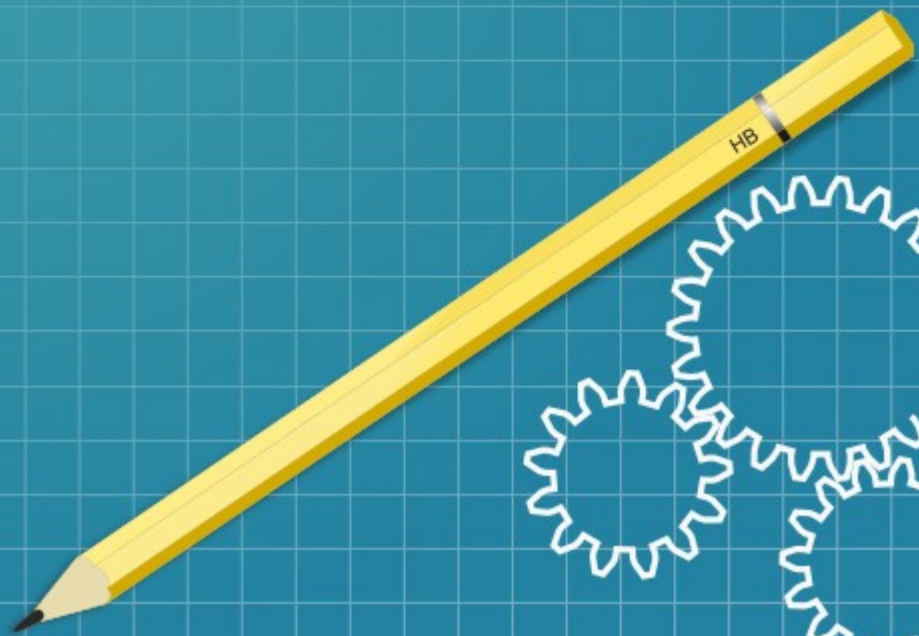
Prepoznavanje skica

Božidar Mitrović 1041/2021
Luka Vujčić 1015/2021



Uvod

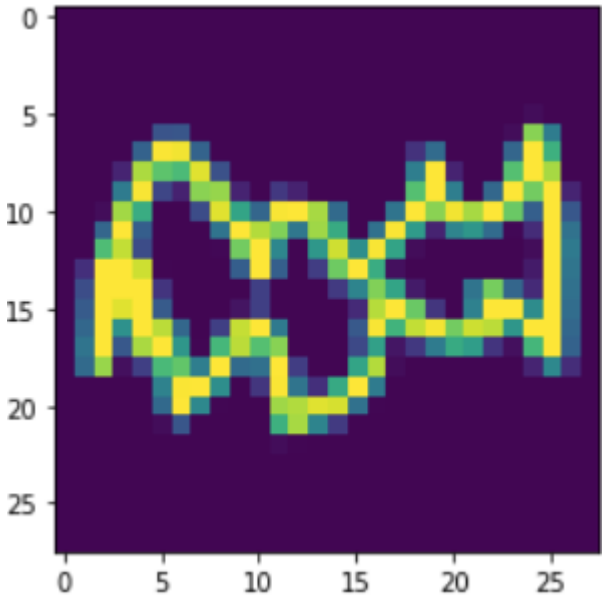
- Prepoznavanje skica
- MNIST, Fashion MNIST

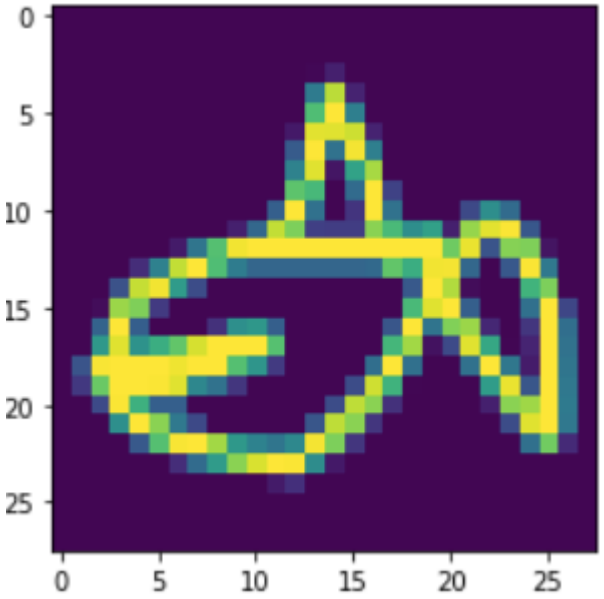
Inicijalan pristup

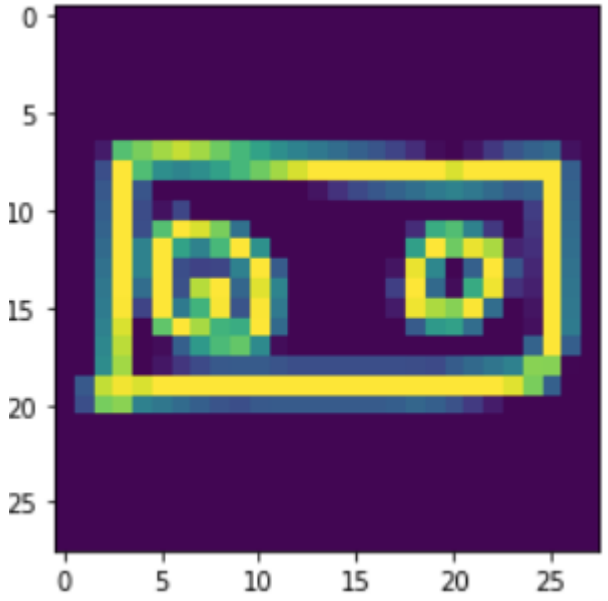
- Free-hand Sketch Recognition Classification (2017)
- 250 klasa, preko 20000 skica
- Dimenzije slika: (128, 128, 3)
- Preciznost 66,5%

Skup podataka

- quickdraw_bitmap dataset
- Dimenzija slika: (28, 28, 1)



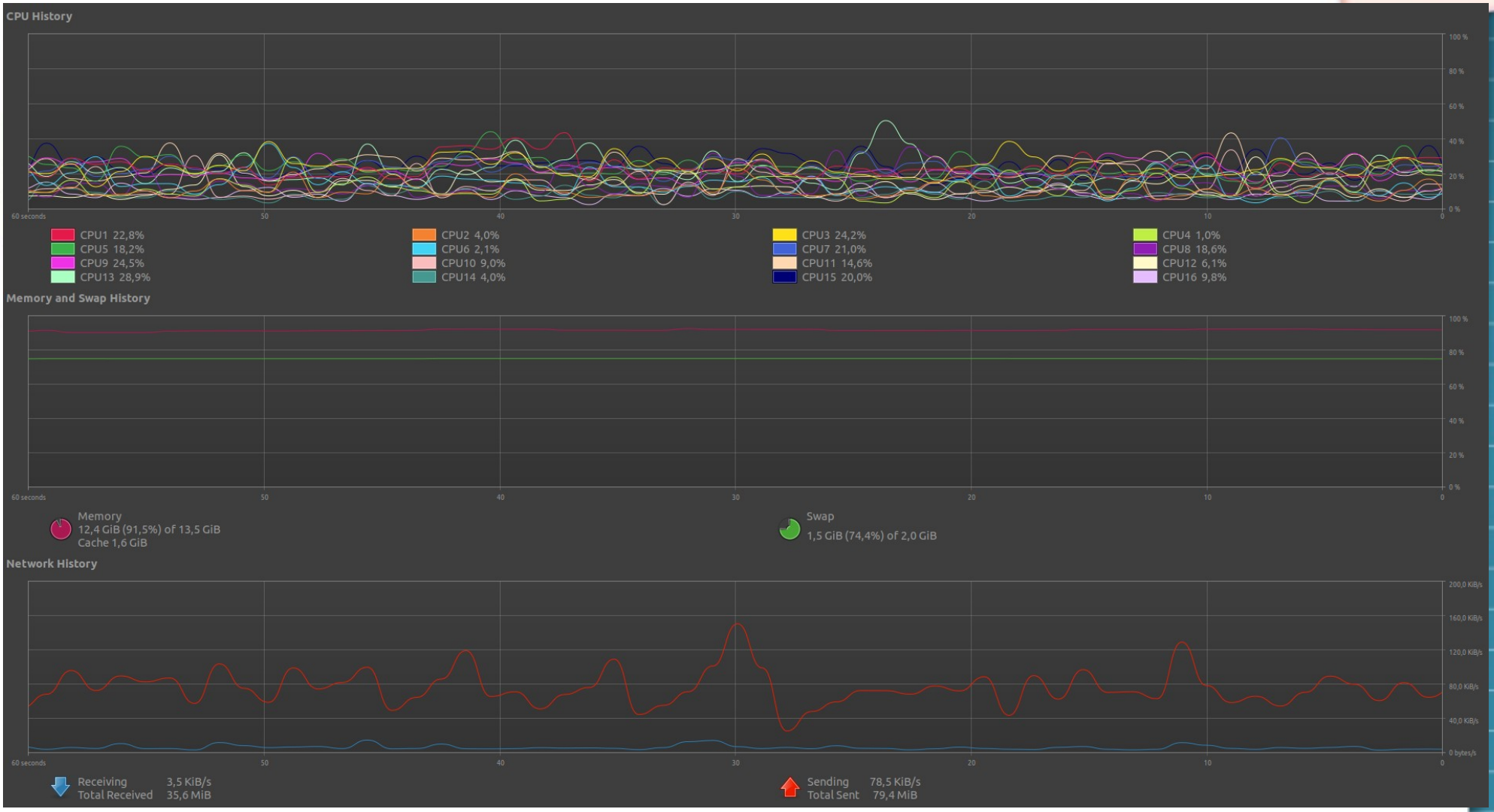




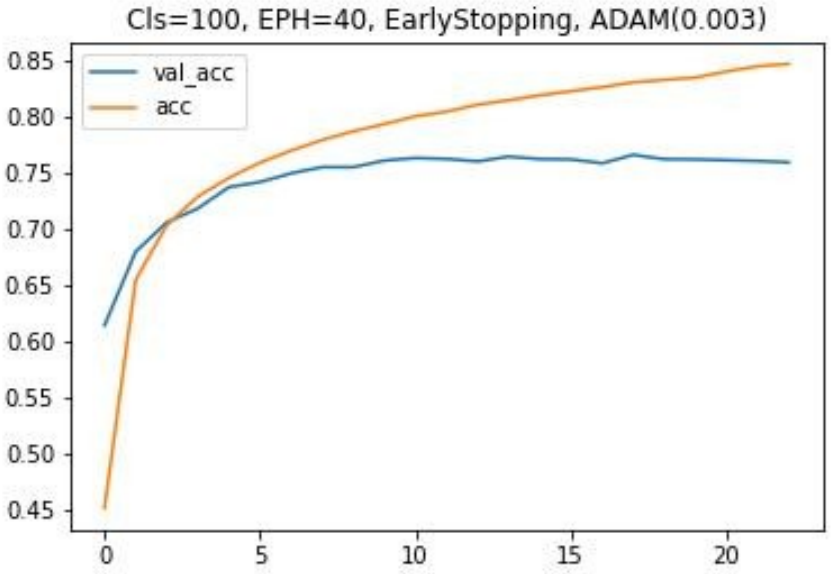
Model

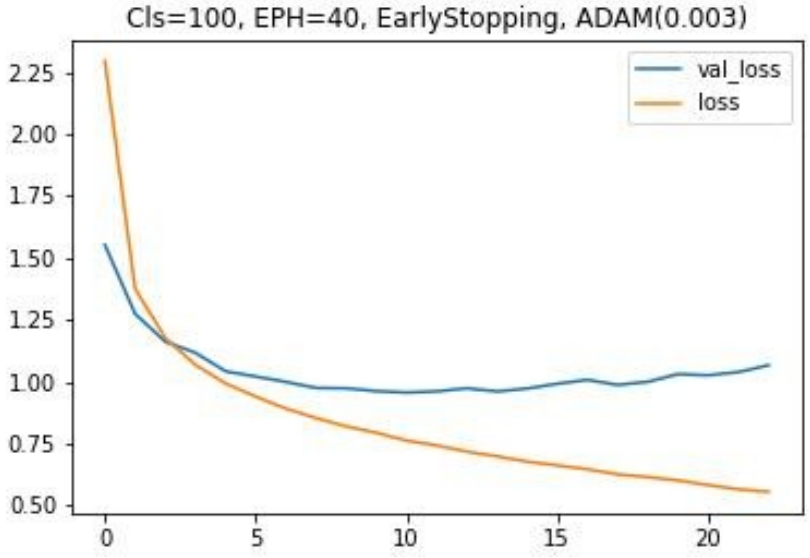
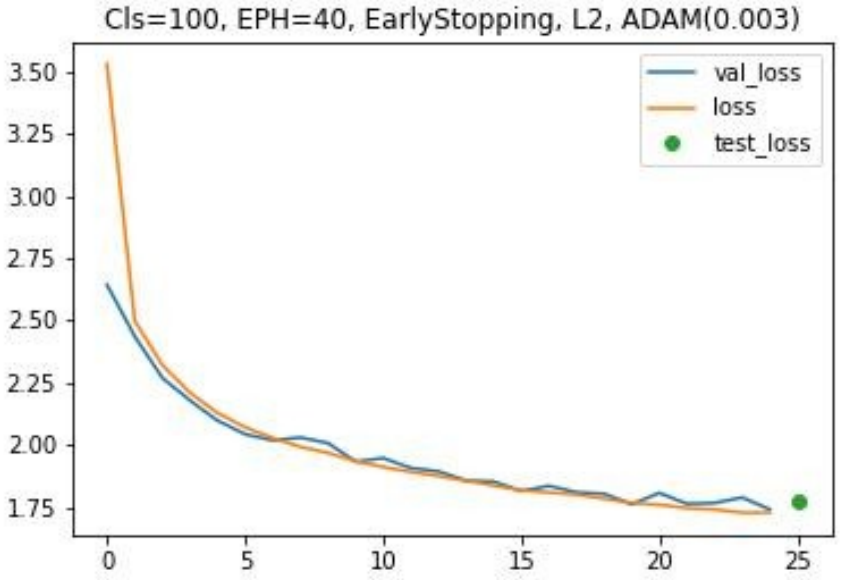
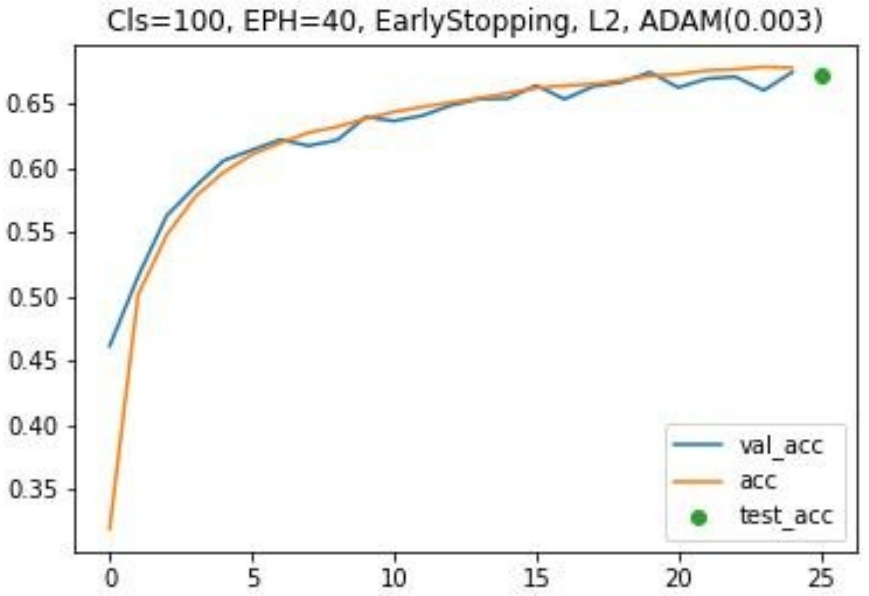
```
Model: "sequential"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 conv2d (Conv2D)             (None, 28, 28, 32)        832

 max_pooling2d (MaxPooling2D  (None, 14, 14, 32)       0
 )

 conv2d_1 (Conv2D)           (None, 14, 14, 32)        9248

 max_pooling2d_1 (MaxPooling  (None, 7, 7, 32)         0
 2D)

 conv2d_2 (Conv2D)           (None, 7, 7, 64)          18496

 max_pooling2d_2 (MaxPooling  (None, 3, 3, 64)         0
 2D)

 flatten (Flatten)           (None, 576)               0

 dense (Dense)               (None, 512)               295424

 dense_1 (Dense)             (None, 100)               51300

=================================================================
Total params: 375,300
Trainable params: 375,300
Non-trainable params: 0
```

Faza treniranja



Rezultati inicijalnog modela





Rezultati popravljenog modela