Deep Restore

Architecture Comparision Server

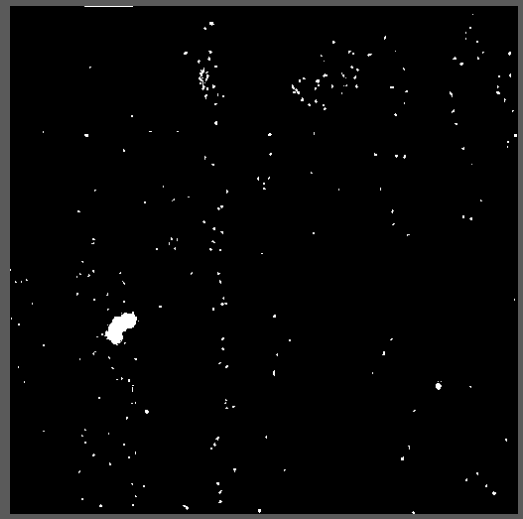
September 1, 2018

Description

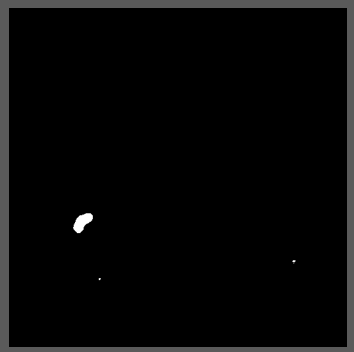
- Densenet use patches of size 128x128 + mirror padding (padding size depending on architecture)
- All testes architectures use the information of previous, current and next frame
- 1000 iterations
- augmented training set
- last activation function: sigmoid
- train and test data visualized for early stopping
- accuracy and loss for each architecture and early stopping
- dropout with 0.85 keep probability
- L2 regularization of weights (weight decay)
- variation of training samples

Ex1

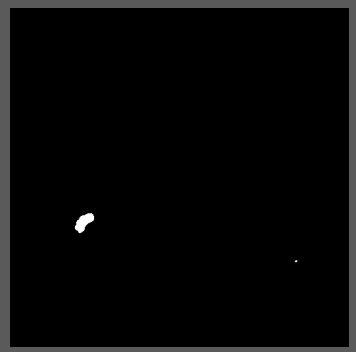
(a) Input



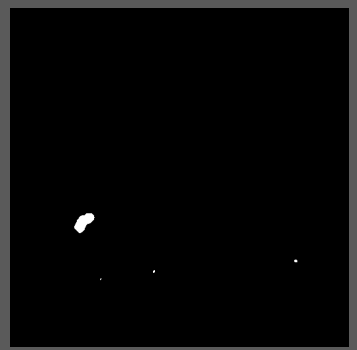
(b) GT



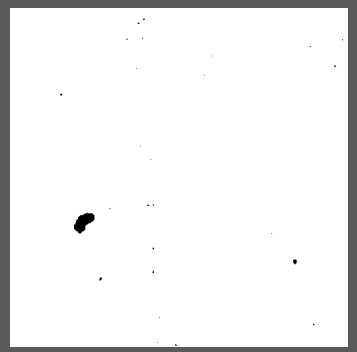
(a) densnet many



(b) densnet few

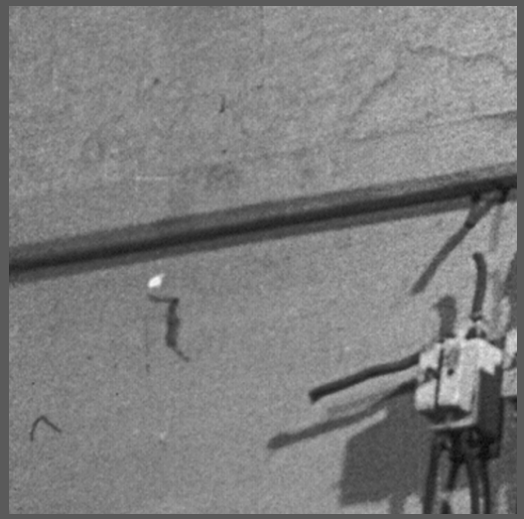


(c) densenet



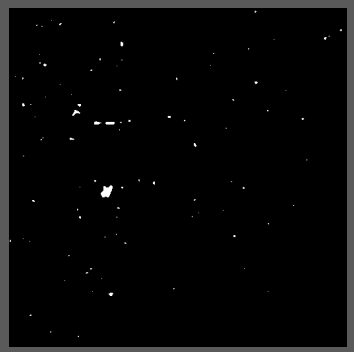
(d) densnet no reg

Ex2

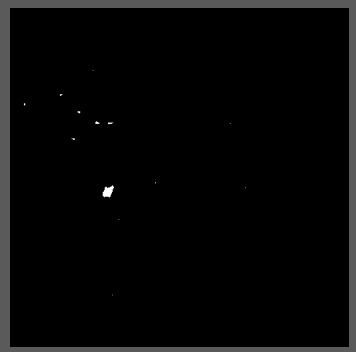


(a) Input

(b) GT

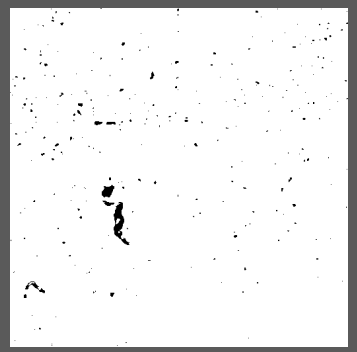


(a) densnet many



(b) densnet few

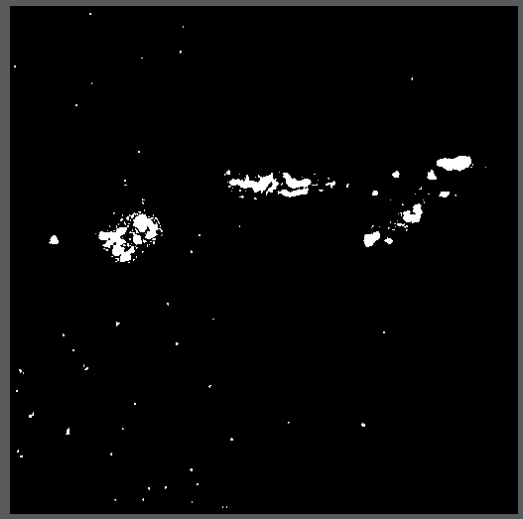
(c) densenet



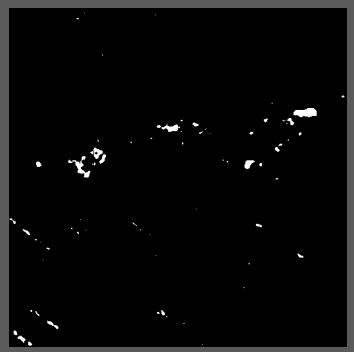
(d) densnet no reg

Ex3

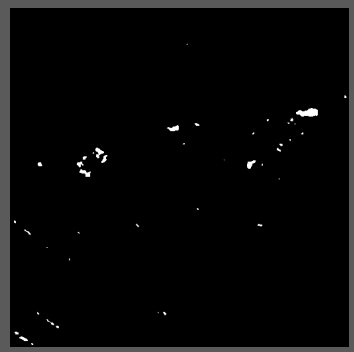
(a) Input



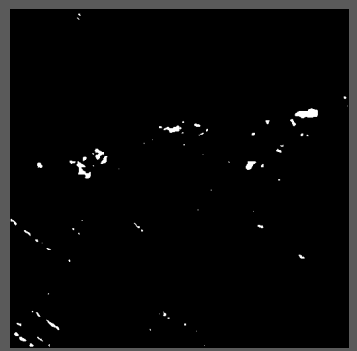
(b) GT



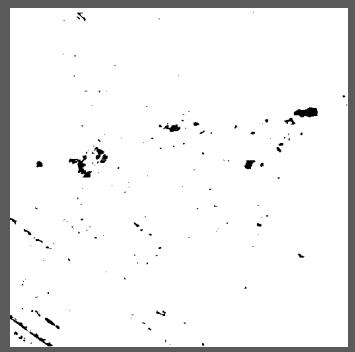
(a) densnet many



(b) densnet few



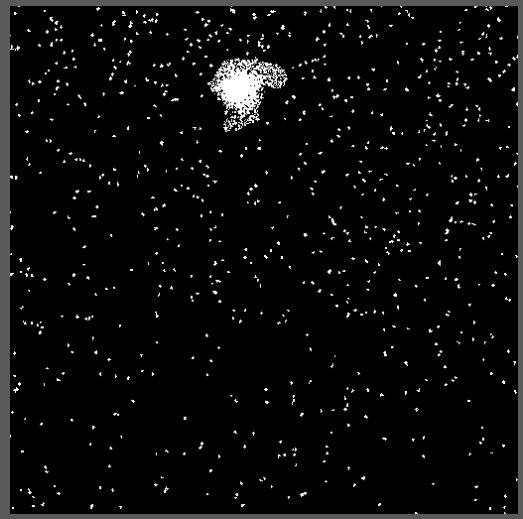
(c) densenet



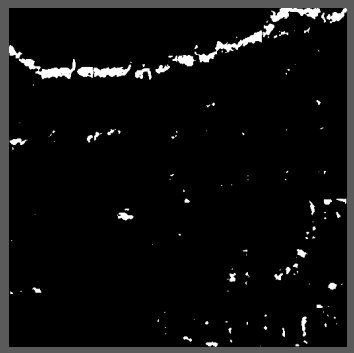
(d) densnet no reg

Ex4

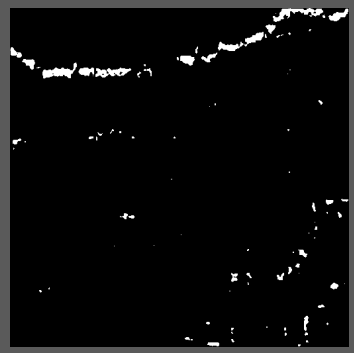
(a) Input



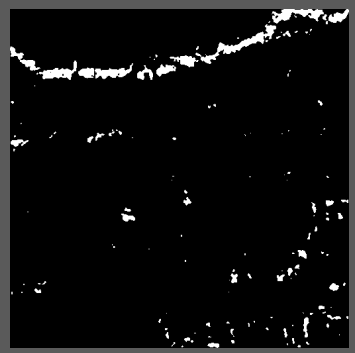
(b) GT



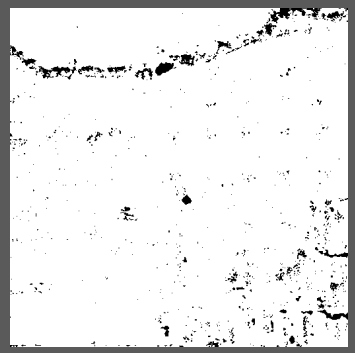
(a) densnet many



(b) densnet few



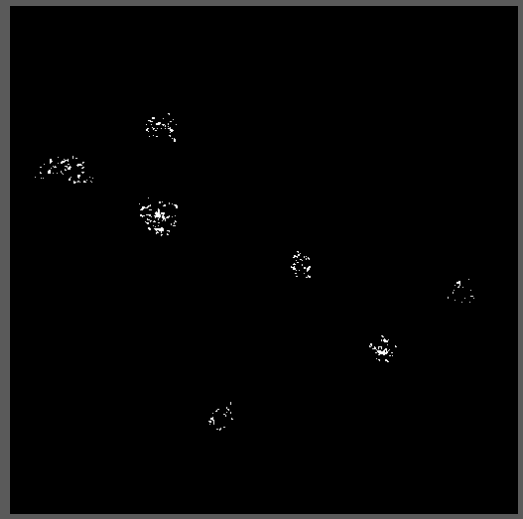
(c) densenet



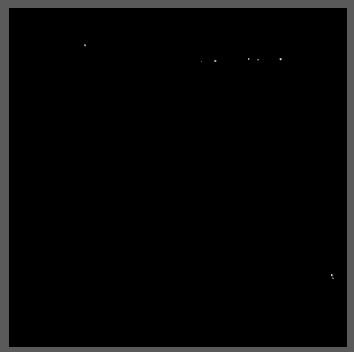
(d) densnet no reg

Ex5

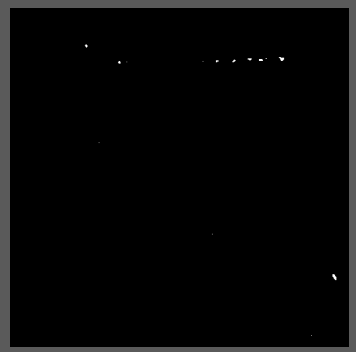
(a) Input



(b) GT

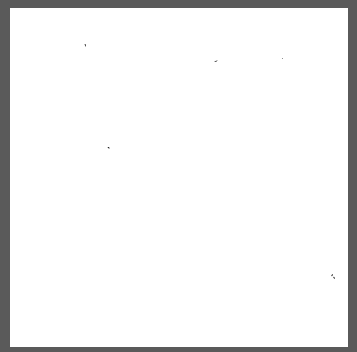


(a) densnet many



(b) densnet few

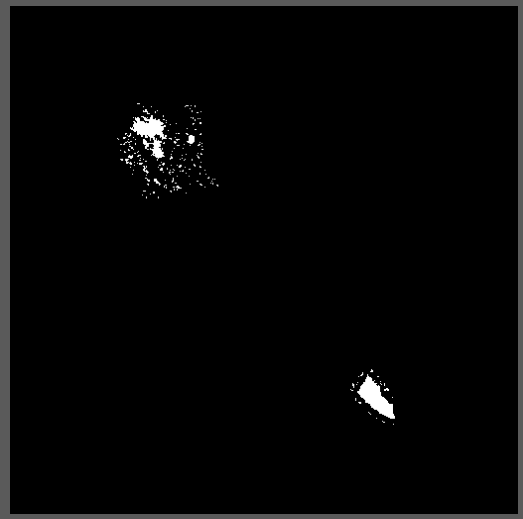
(c) densenet



(d) densnet no reg

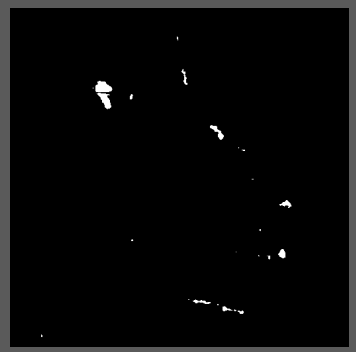
Ex6

(a) Input



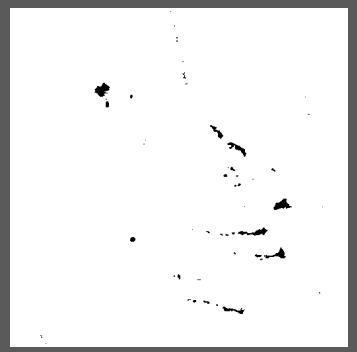
(b) GT

(a) densnet many



(b) densnet few

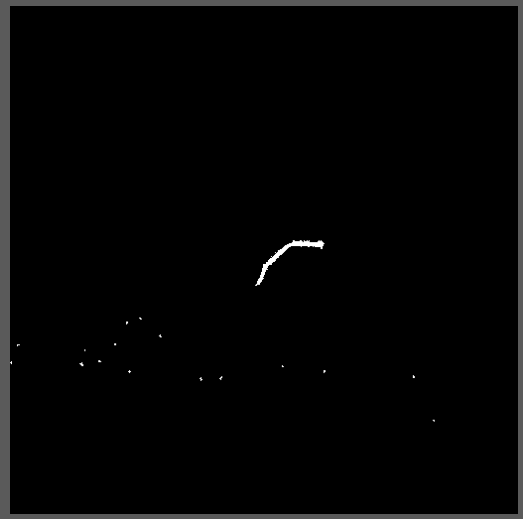
(c) densenet



(d) densnet no reg

Ex7

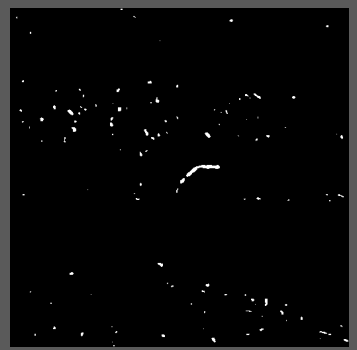
(a) Input



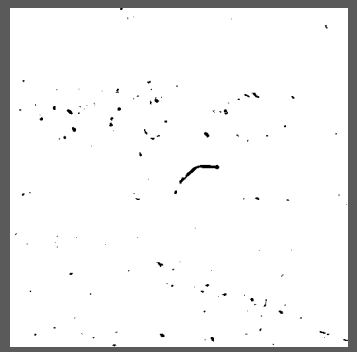
(b) GT

(a) densnet many

(b) densnet few

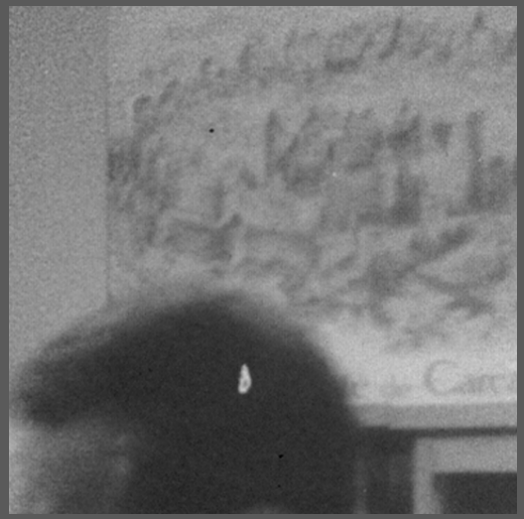


(c) densenet

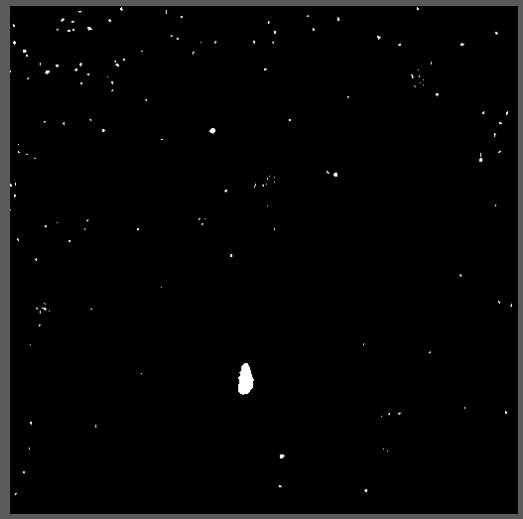


(d) densnet no reg

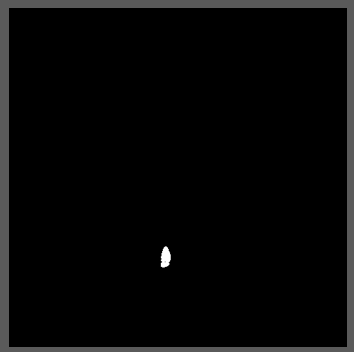
Ex8



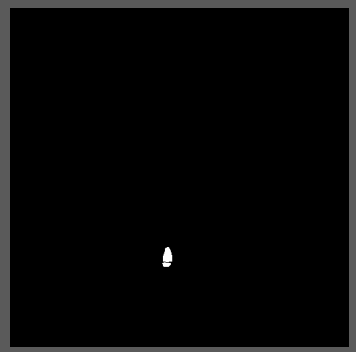
(a) Input



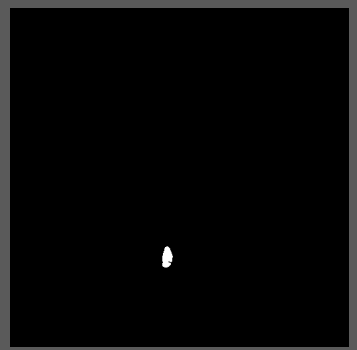
(b) GT



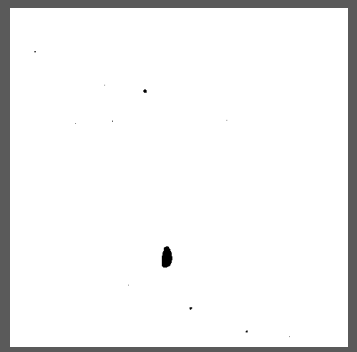
(a) densnet many



(b) densnet few



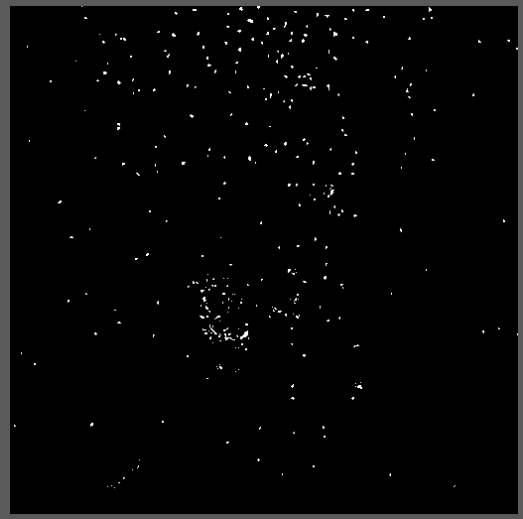
(c) densenet



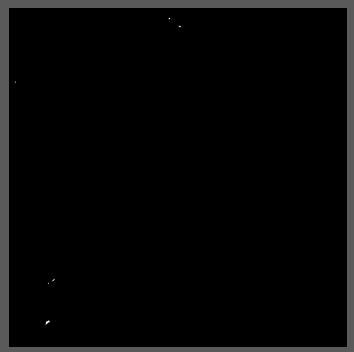
(d) densnet no reg

Ex9

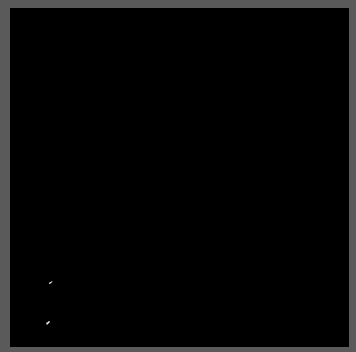
(a) Input



(b) GT

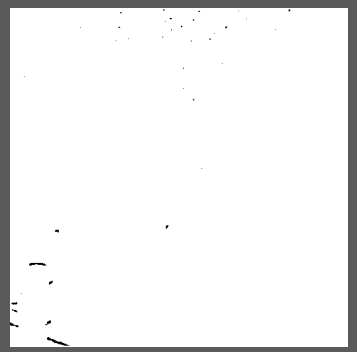


(a) densnet many



(b) densnet few

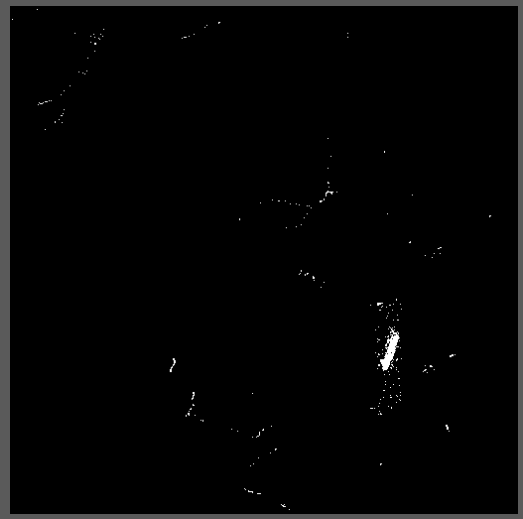
(c) densenet



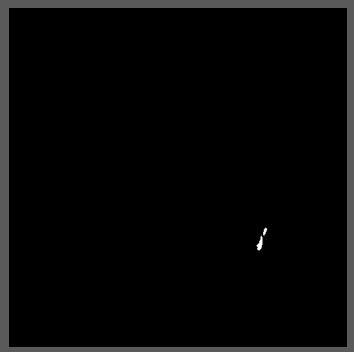
(d) densnet no reg

Ex10

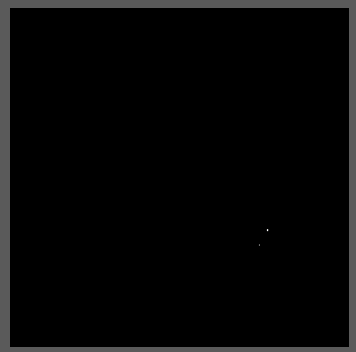
(a) Input



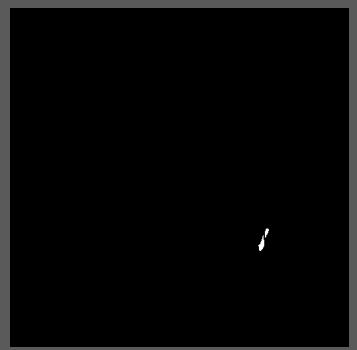
(b) GT



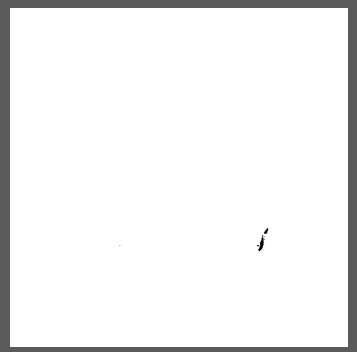
(a) densnet many



(b) densnet few



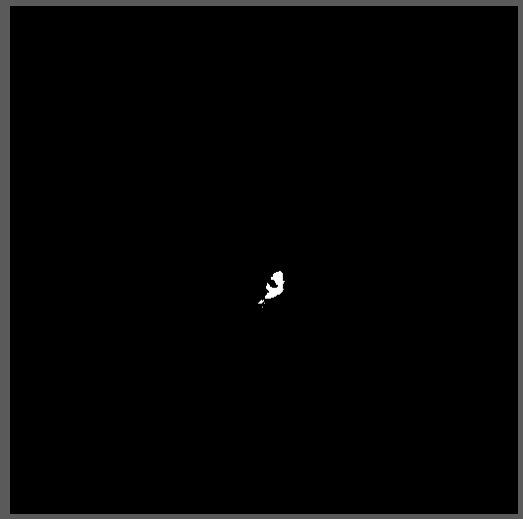
(c) densenet



(d) densnet no reg

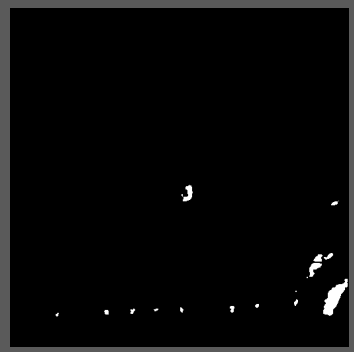
Ex11

(a) Input



(b) GT

(a) densnet many



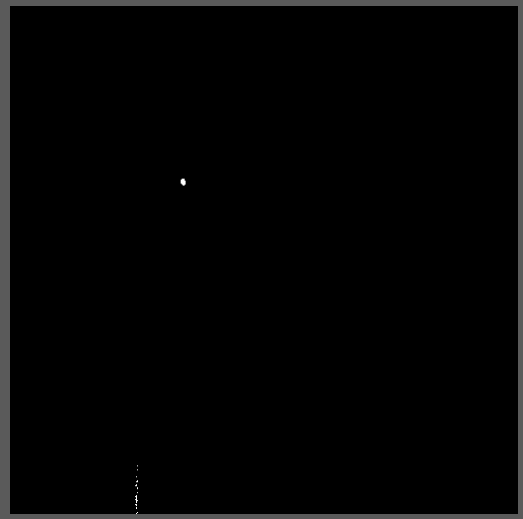
(b) densnet few

(c) densenet

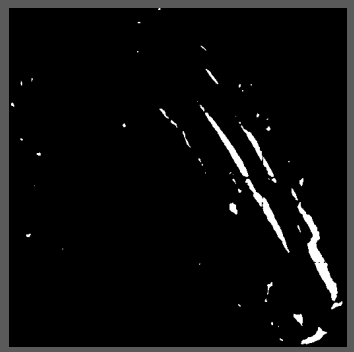
(d) densnet no reg

Ex12

(a) Input



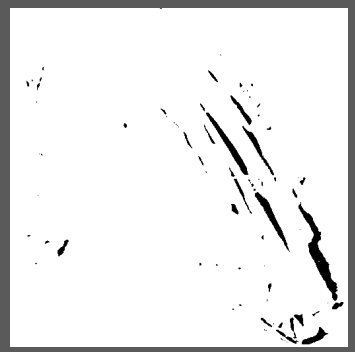
(b) GT



(a) densnet many

(b) densnet few

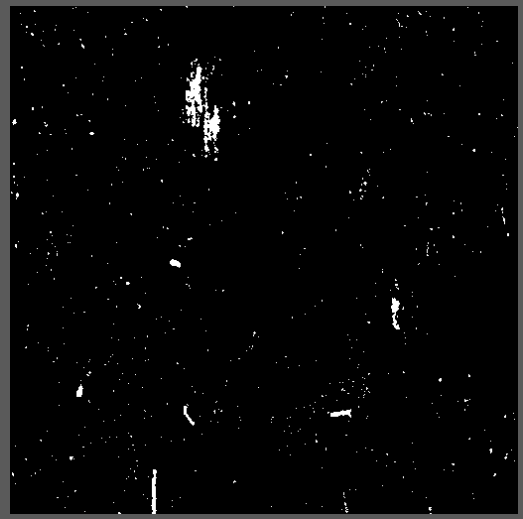
(c) densenet



(d) densnet no reg

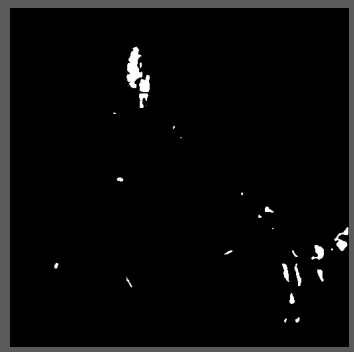
Ex13

(a) Input



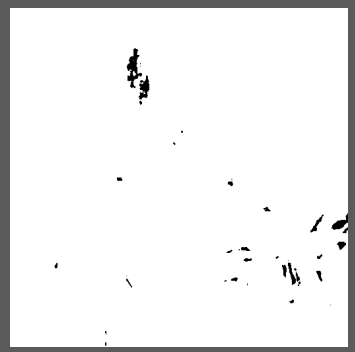
(b) GT

(a) densnet many



(b) densnet few

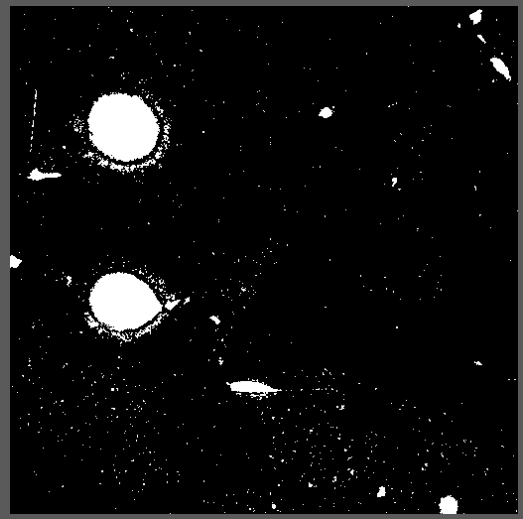
(c) densenet



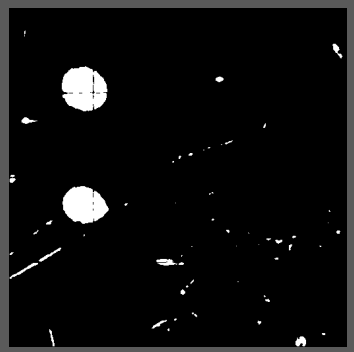
(d) densnet no reg

Ex14

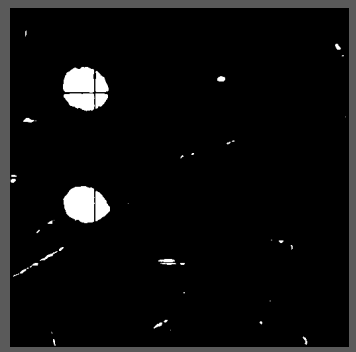
(a) Input



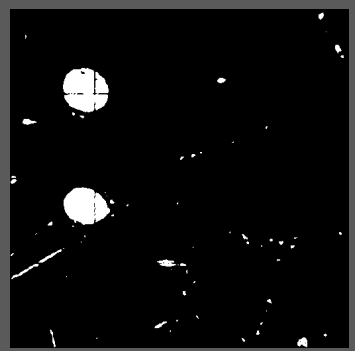
(b) GT



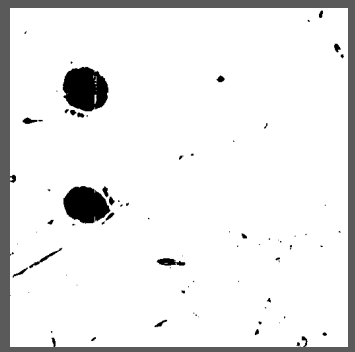
(a) densnet many



(b) densnet few



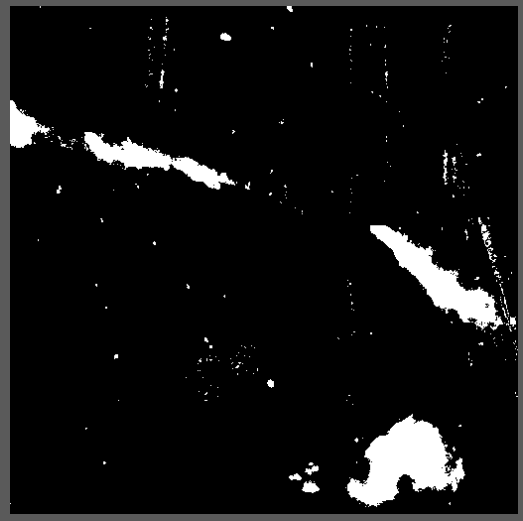
(c) densenet



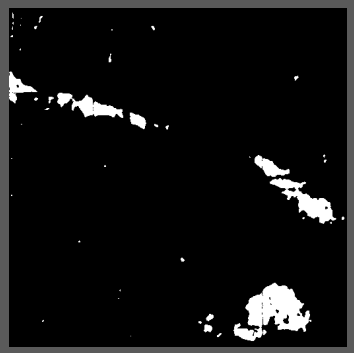
(d) densnet no reg

Ex15

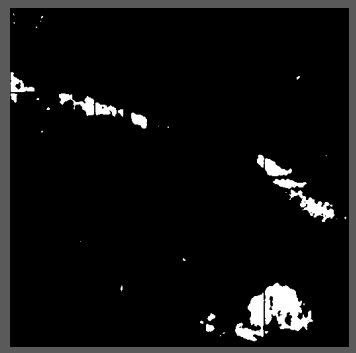
(a) Input



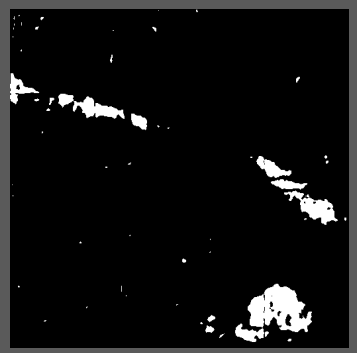
(b) GT



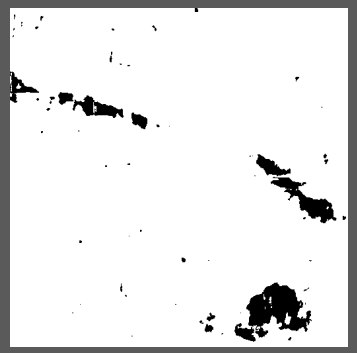
(a) densnet many



(b) densnet few

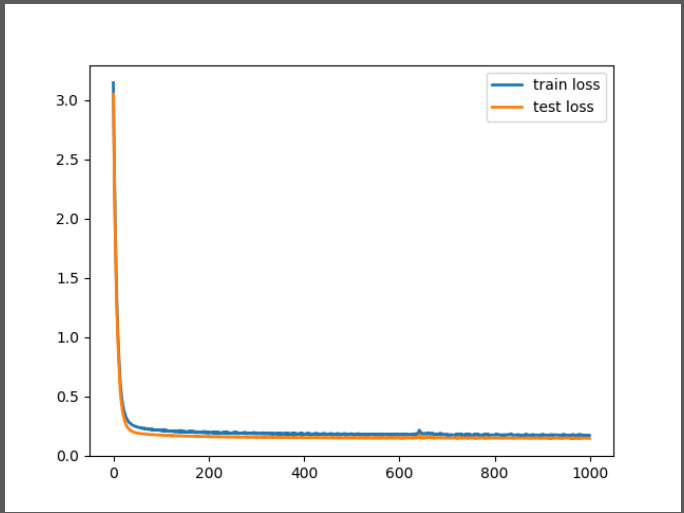


(c) densenet

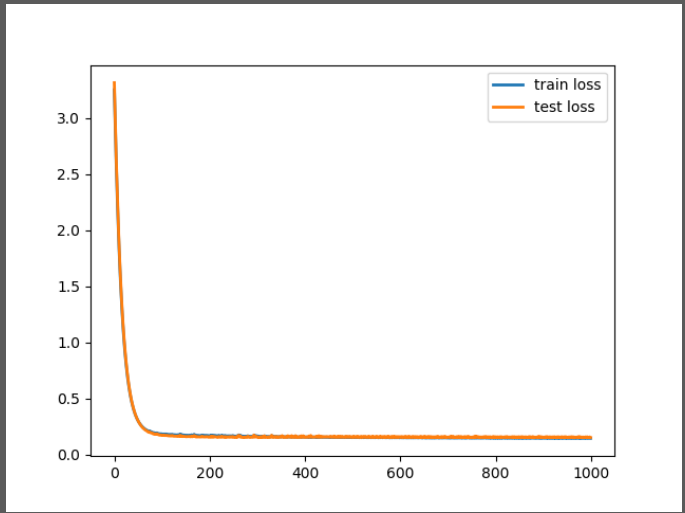


(d) densnet no reg

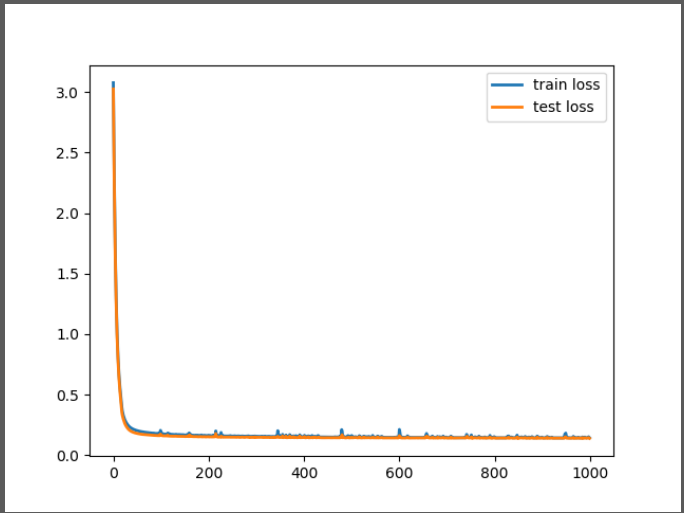
Trainingsloss



(a) densnet many



(b) densnet few



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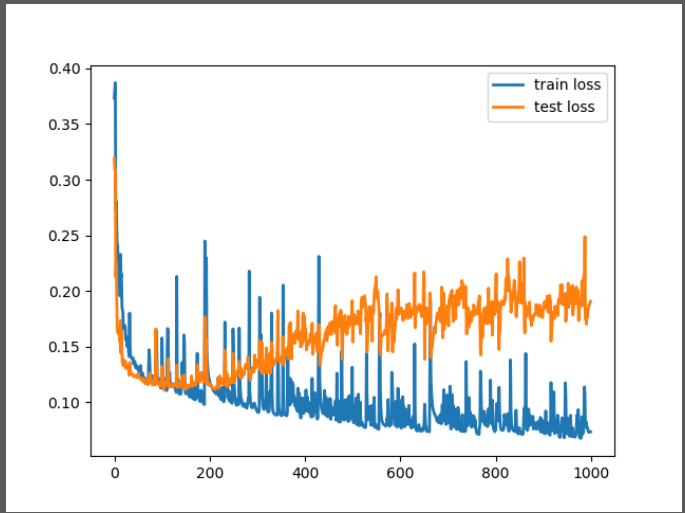
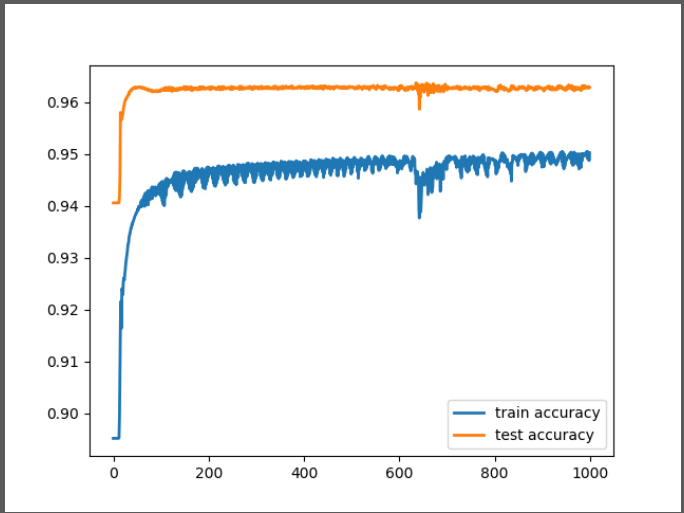
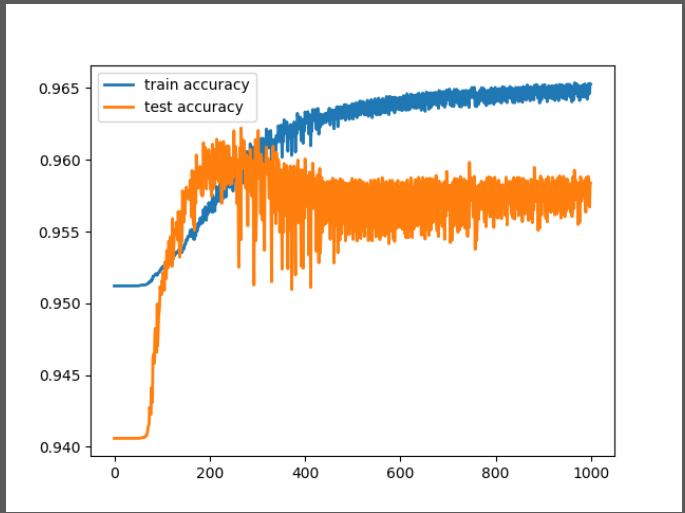


(d) densnet no reg

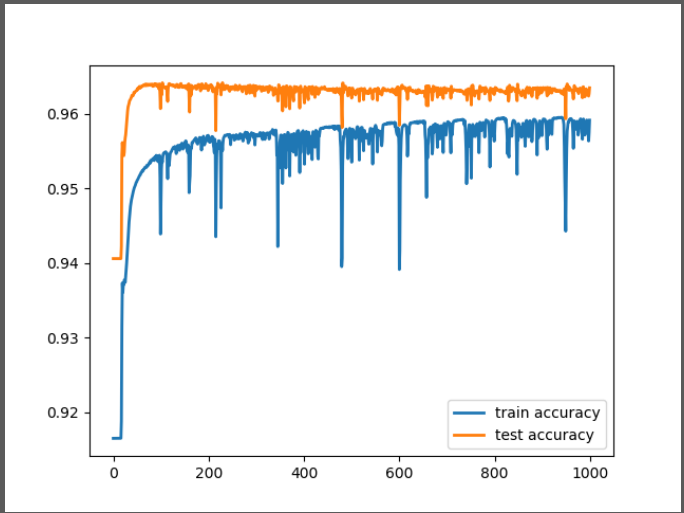
Trainingsaccuracy



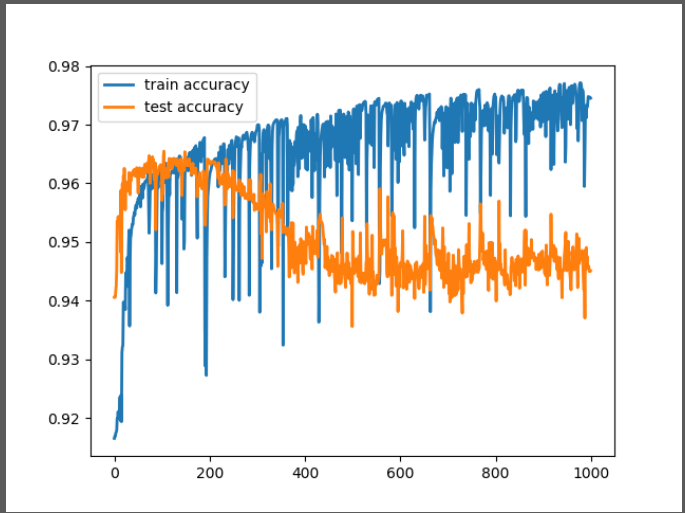
(a) densnet many



(b) densnet few



(c) densenet



(d) densnet no reg