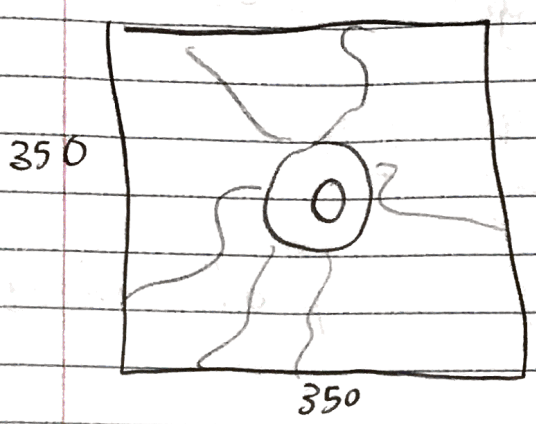
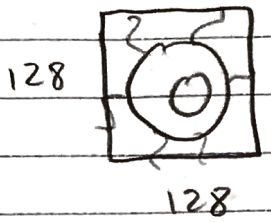
split by glaux and not glaux → all of them are split

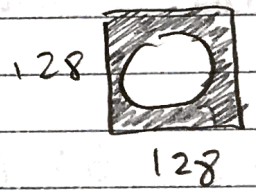
dataset 1:



dataset 2:

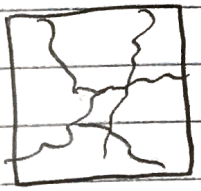


dataset 3: (disc segmented)



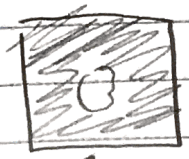
take dataset 2

dataset 4: (retina segmented)



take dataset 2 again

$\frac{1}{5}$ of glaucoma
$\frac{1}{5}$ of not glaucoma



make cup mask on 1/5th of dataset 2

TRAIN CUP SEGMENTATION CLASSIFIER*

(cont'd on next page)

* [redacted] keep a copy of manually segmented cups that are split by glaucoma and not glaucoma. Make another copy and merge the 2 categories in order to train cup seg. models.

2 OPTIONS

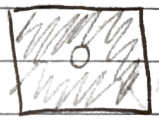
1) Use trained cup segmentation models

Predict on 4/5ths (split by glauc / not glauc) that we did not manually segment

Pick best results after trying diff models

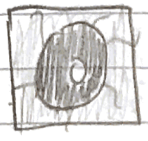
2) If models suck, manually segment other 4/5ths of the data that we did not already manually segment for cups.

dataset 5: (cup segmentations)

128  (obviously split by glauc and not glauc)

128

Then generate dataset 6: (masks)

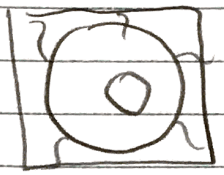
128  ← looks like cartoon (different colors)

128

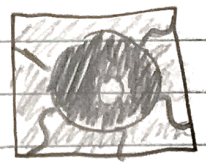
Now, we have dataset 2 and dataset 6 for neural style.

Actual Lumos Lens Images:

dataset 7: (actually taken from Lumos lens. cropped to disc)



dataset 8: (masks generated from dataset 7)

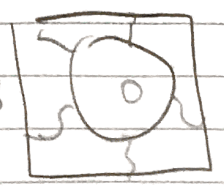


← manually created these masks

RUN DEEP NEURAL STYLE USING THE FOLLOWING DATASETS:

2, 6, 7, 8

dataset 9: (dataset 2 transformed to look like dataset 7. i.e. transformed to look like it was taken using Lumos lens)



NOW, train actual glaucoma detecting classifier