Road Crack Detection
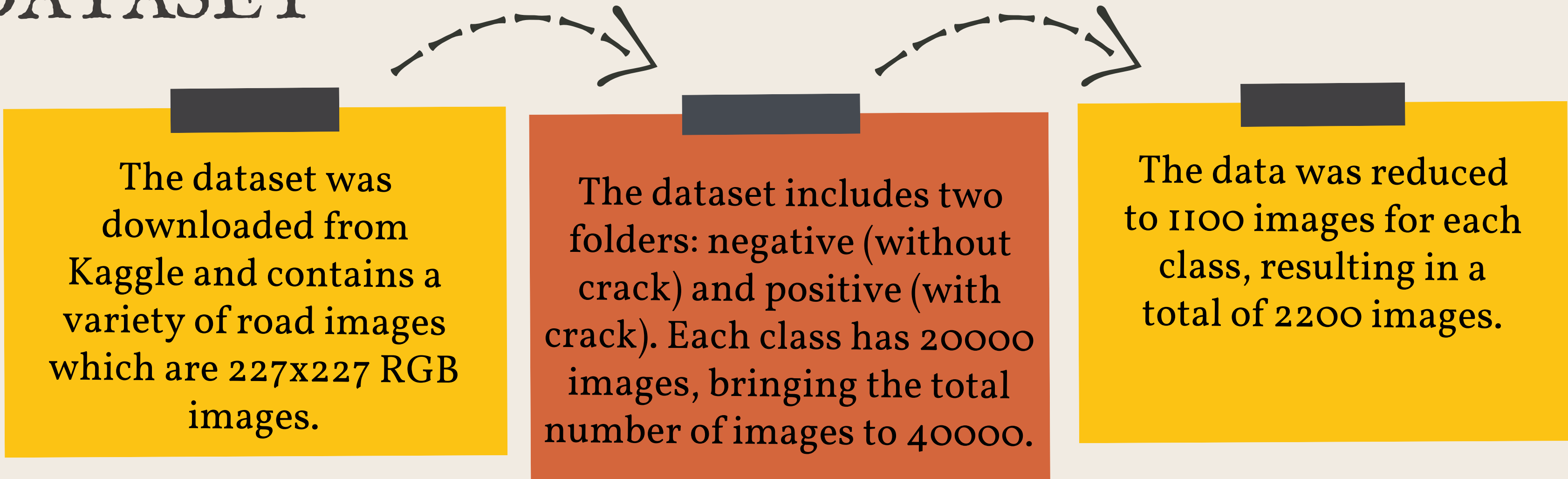
Image processing
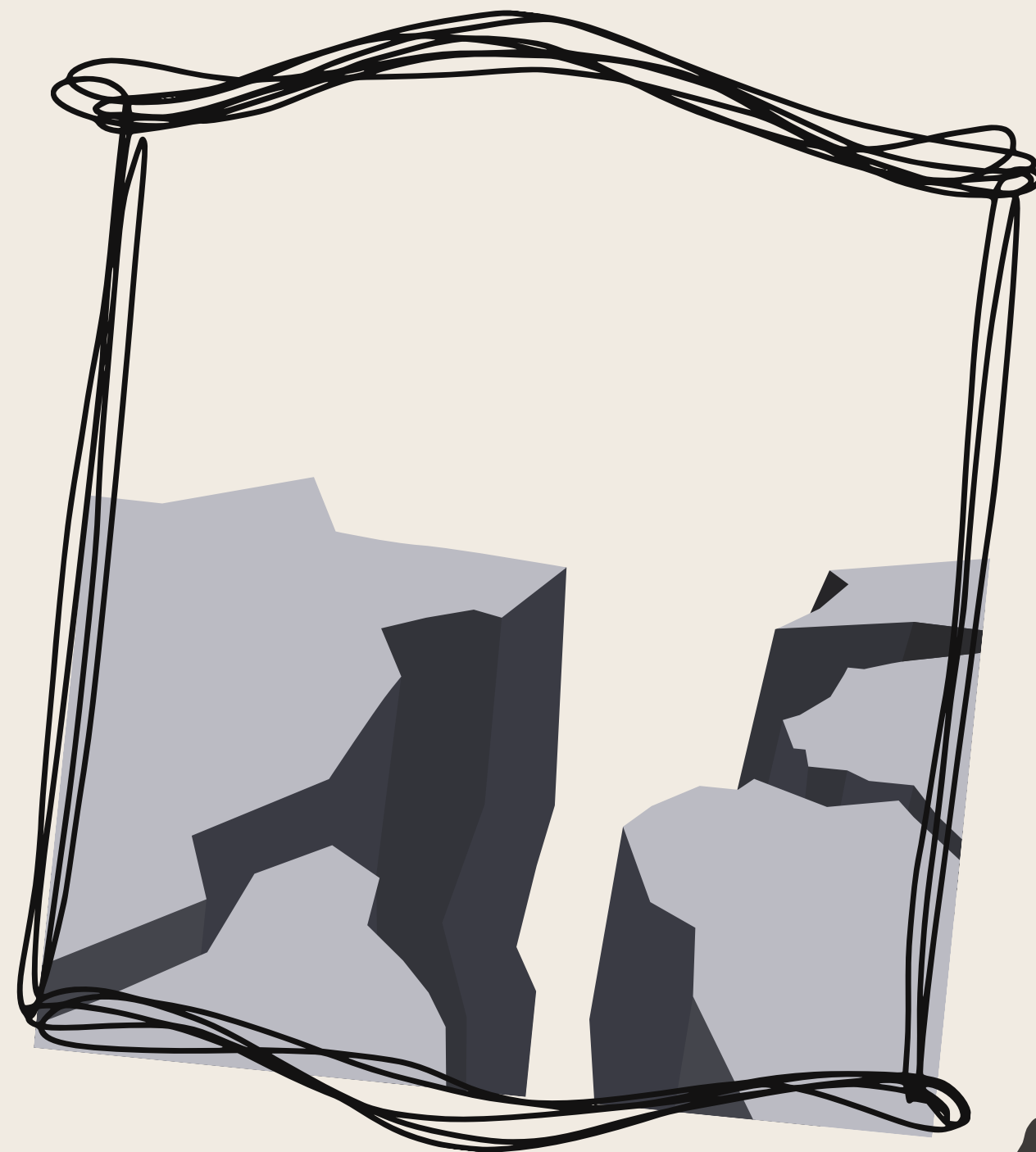
AGENDA

# WHY ROAD CRACK DETECTION?

DATASET

The dataset was downloaded from Kaggle and contains a variety of road images which are 227x227 RGB images.
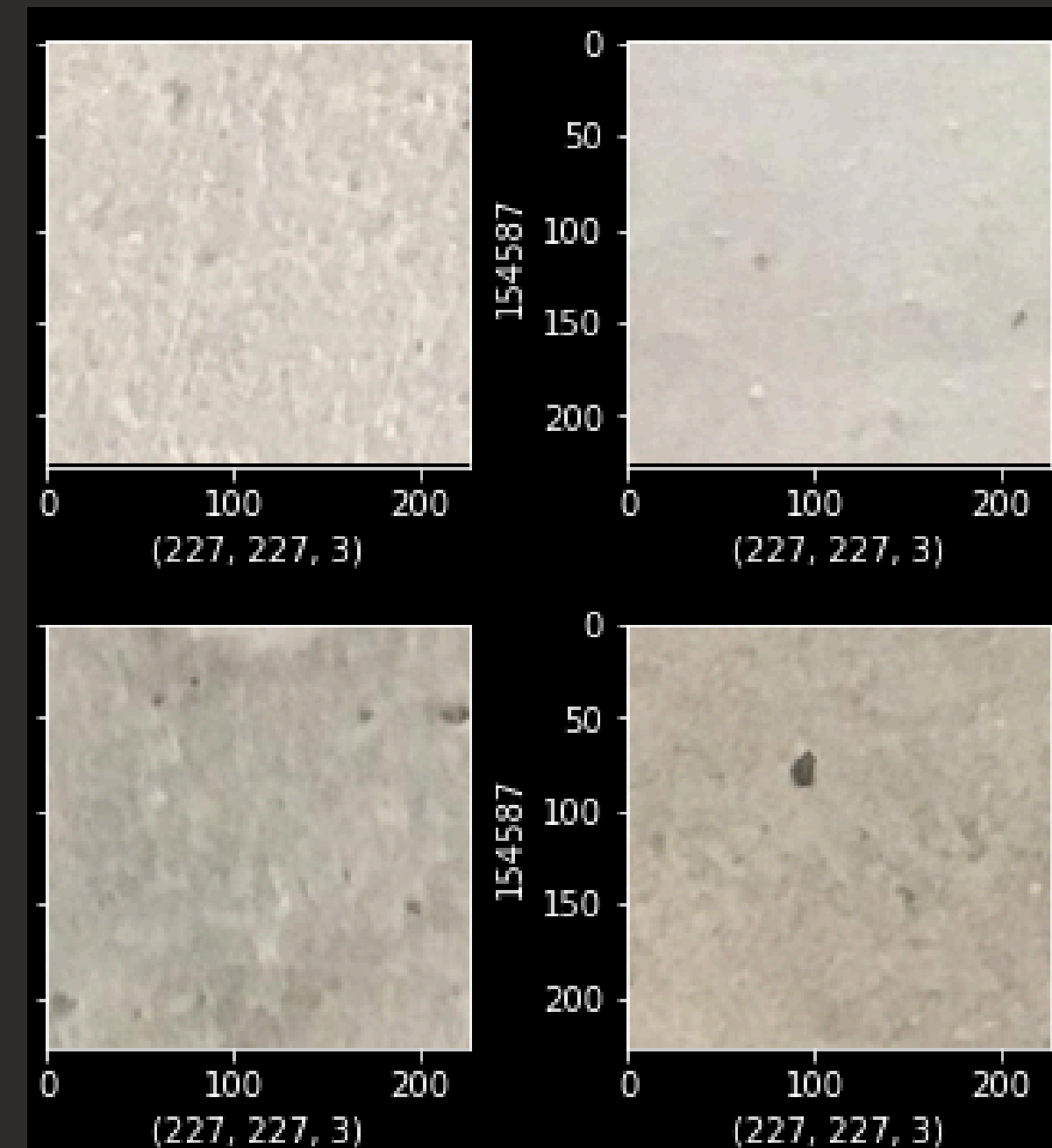
The dataset includes two folders: negative (without crack) and positive (with crack). Each class has 20000 images, bringing the total number of images to 40000.

The data was reduced to 1100 images for each class, resulting in a total of 2200 images.

Original Images
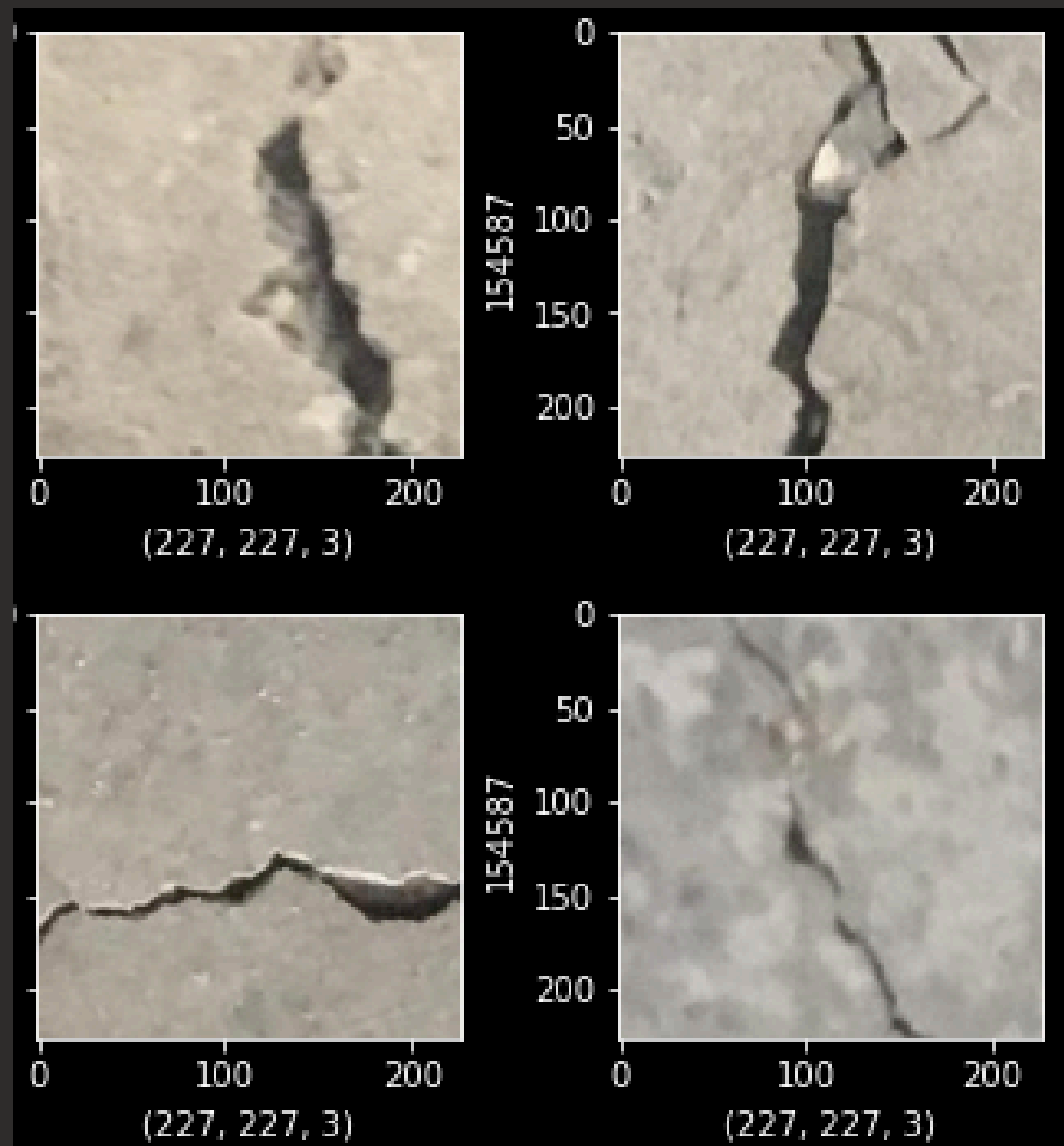
Positive

Negative

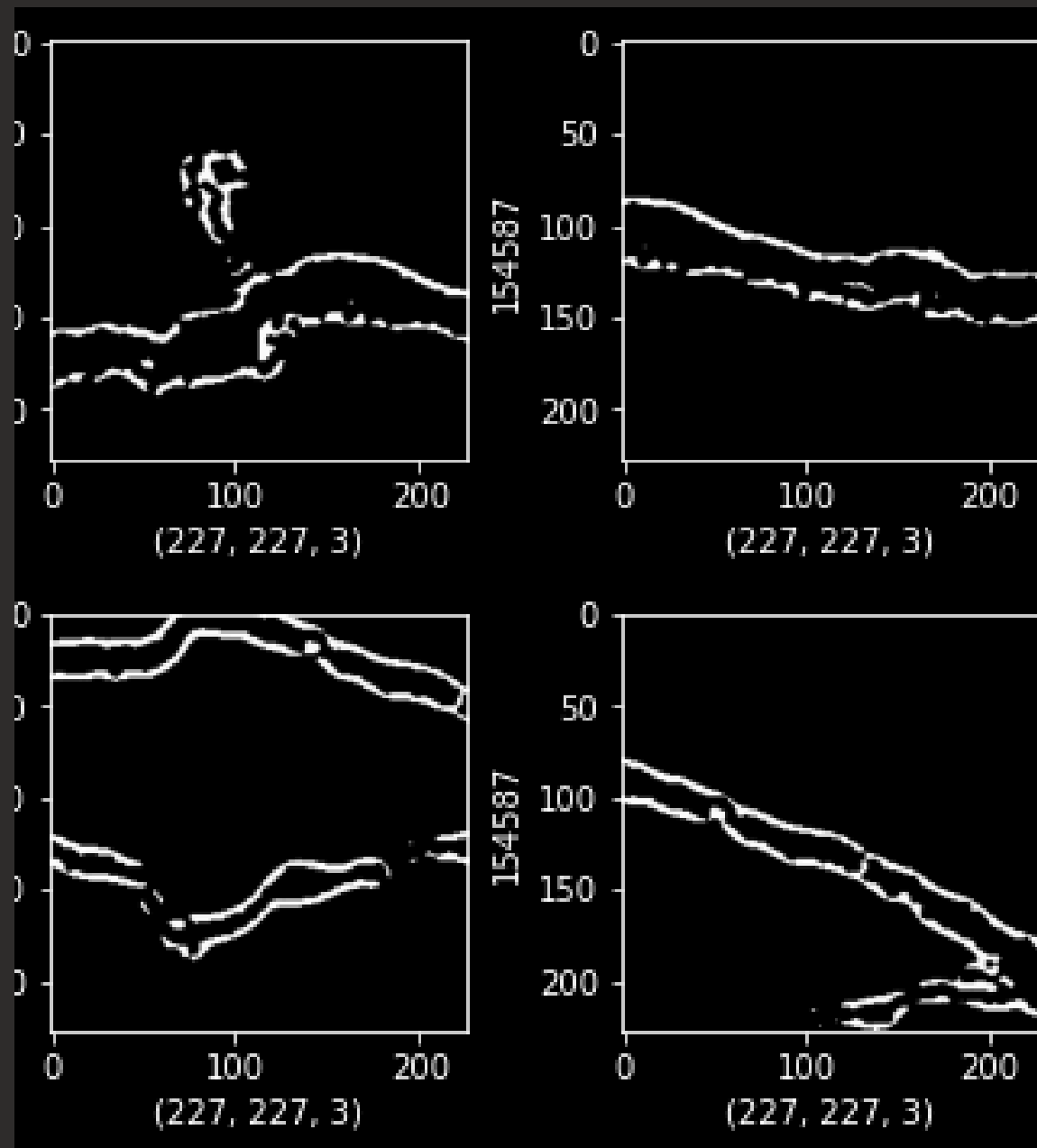# IMAGE PROCESSING TECHNIQUES

3.

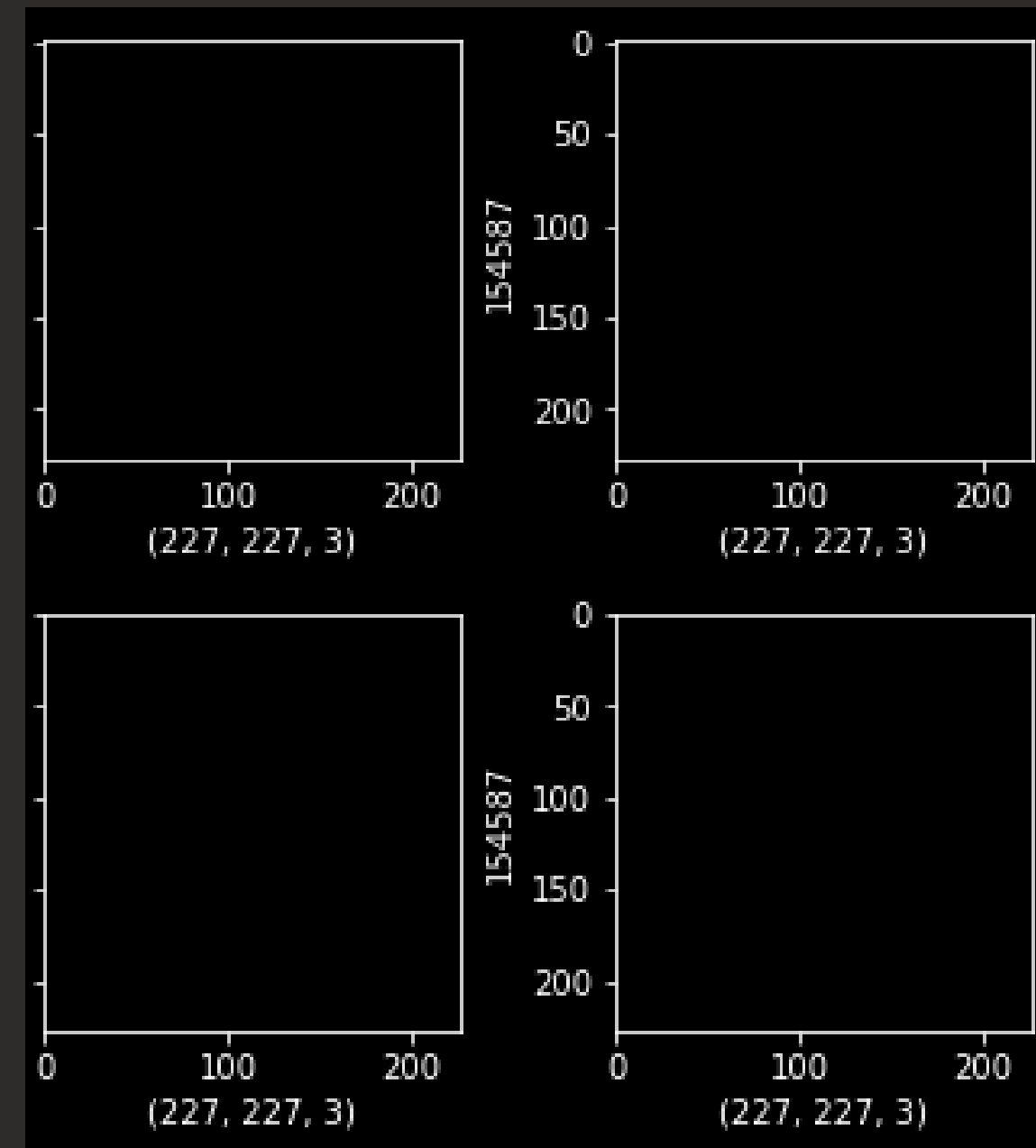GRAYSCALE - - -> GAUSSIAN BLURRING - - -> THRESHOLDING
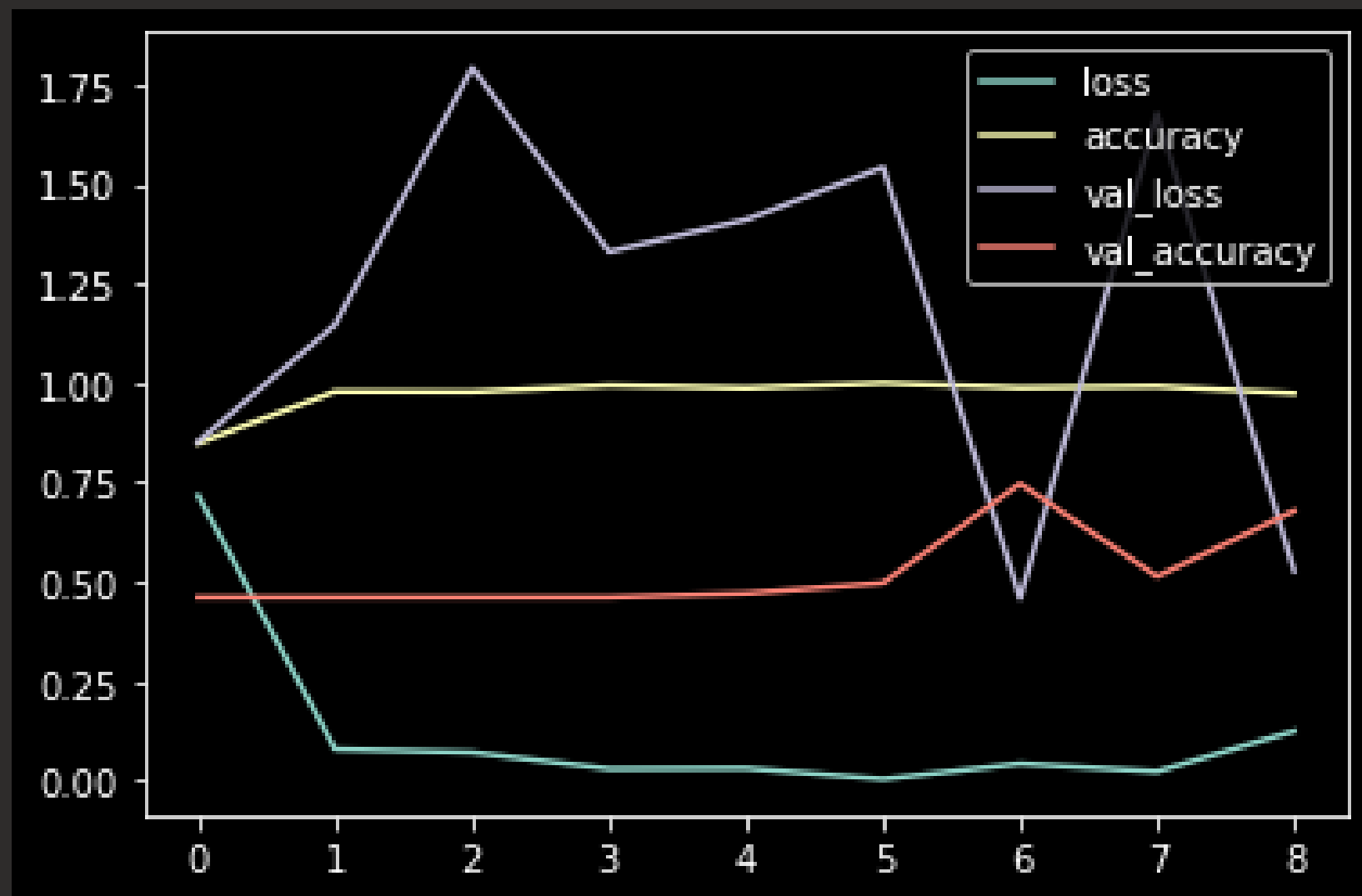
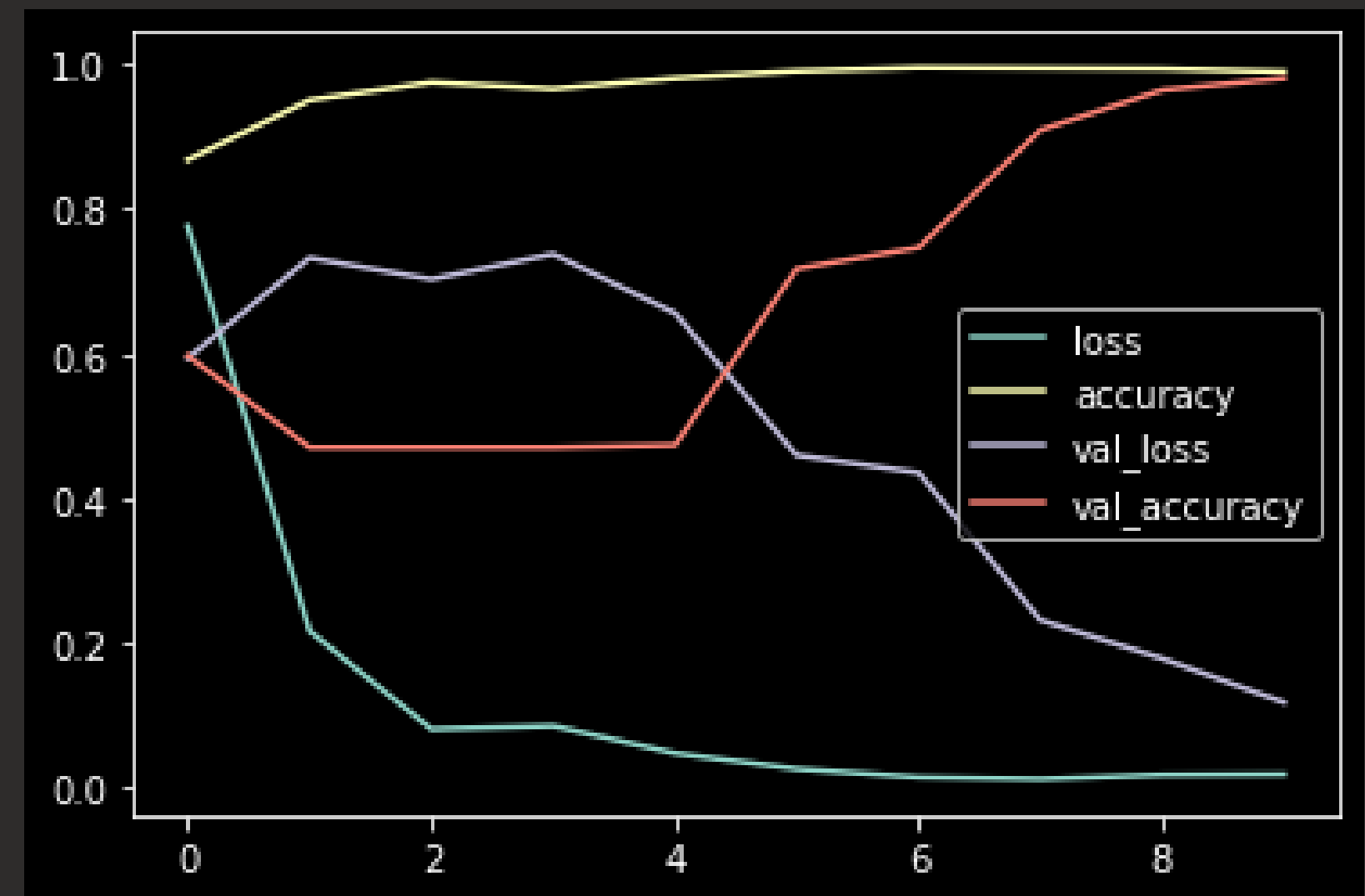# Images After Processing

Positive

Negative

OUR CODE

- Overall view
- Image Processing Techniques
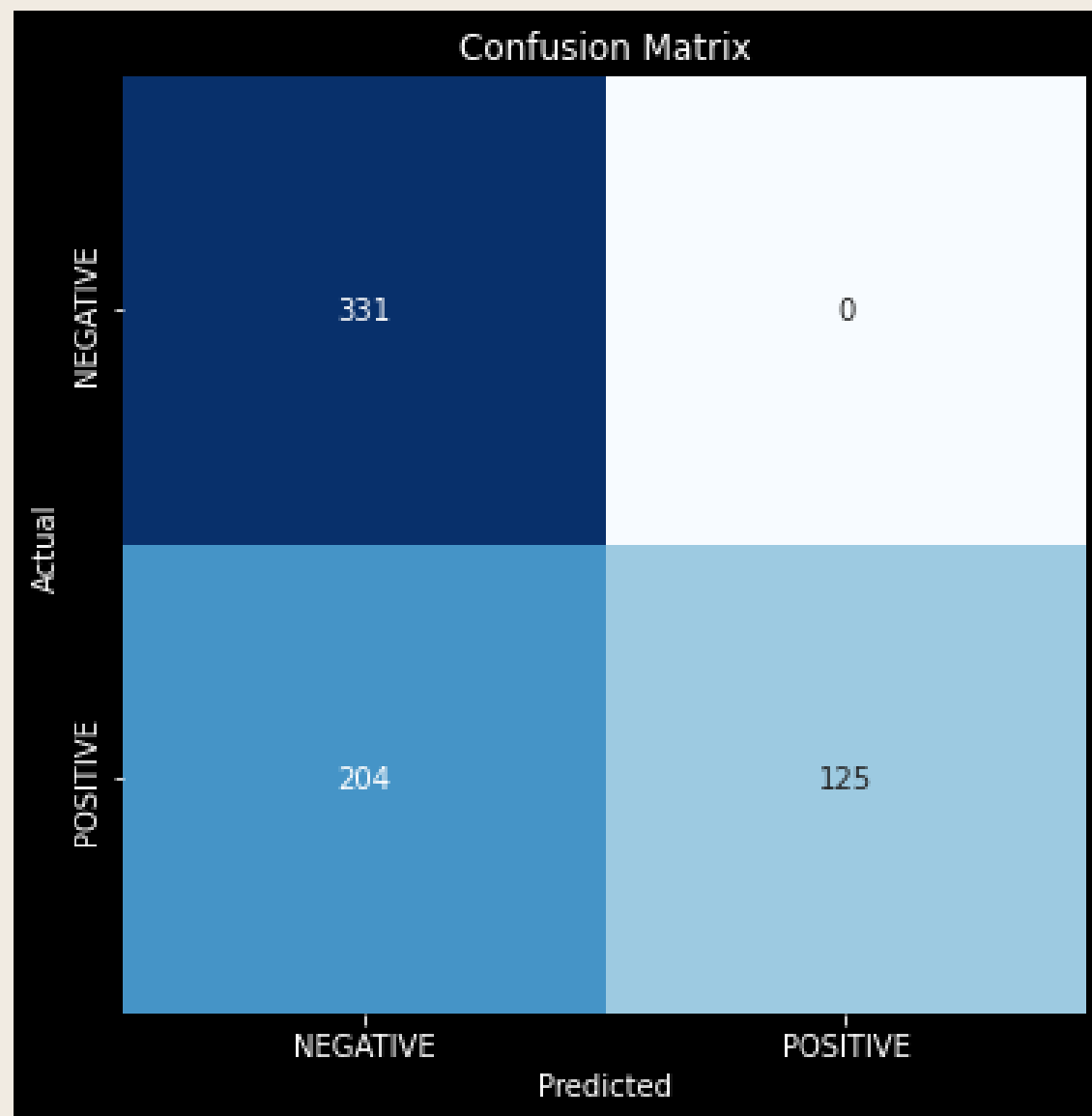- The Model / Model history
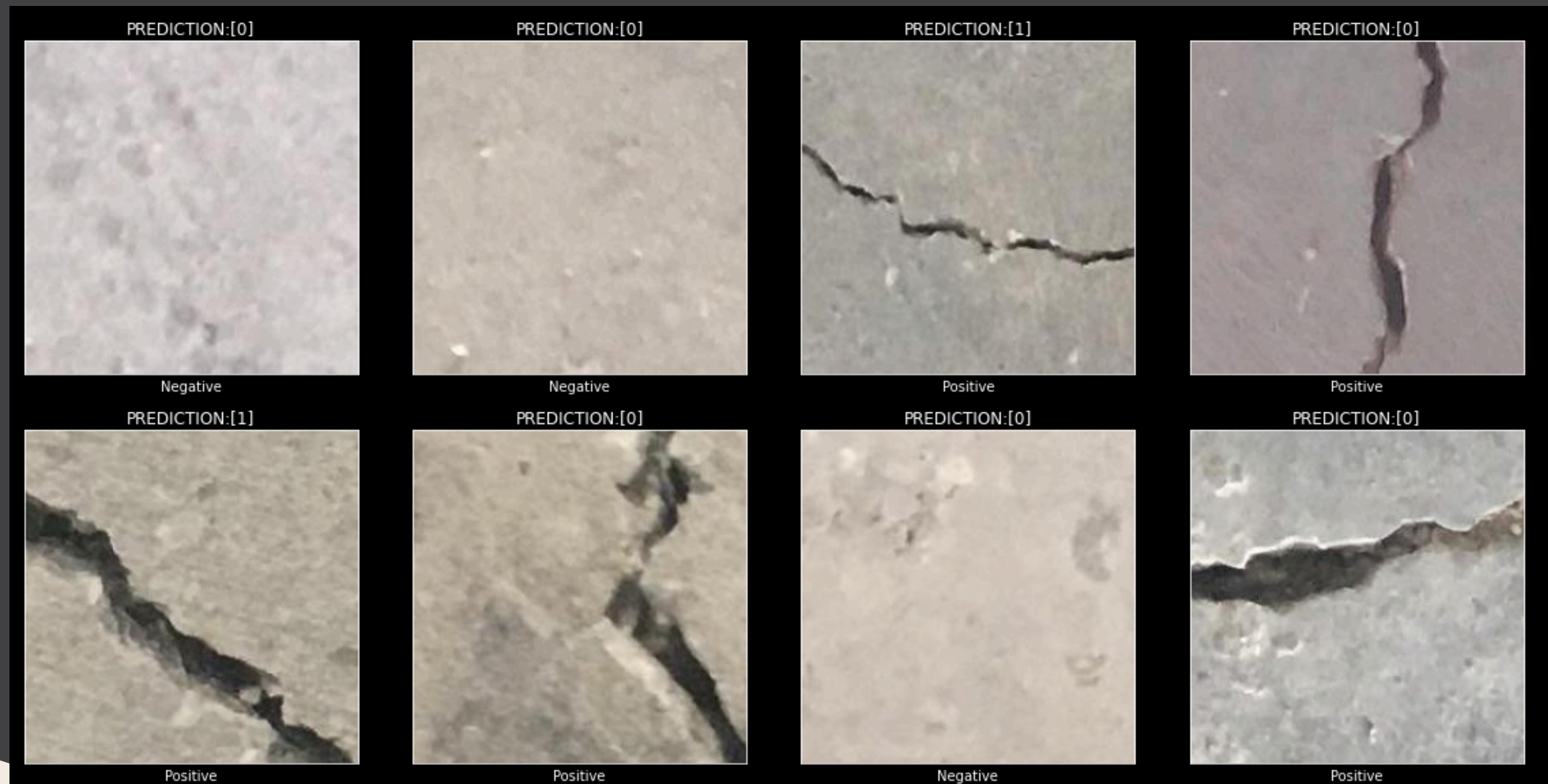
MODEL HISTORY

BEFORE

AFTER

Results before Image Processing

Test Loss:
0.53876

Test Accuracy:
69.09%

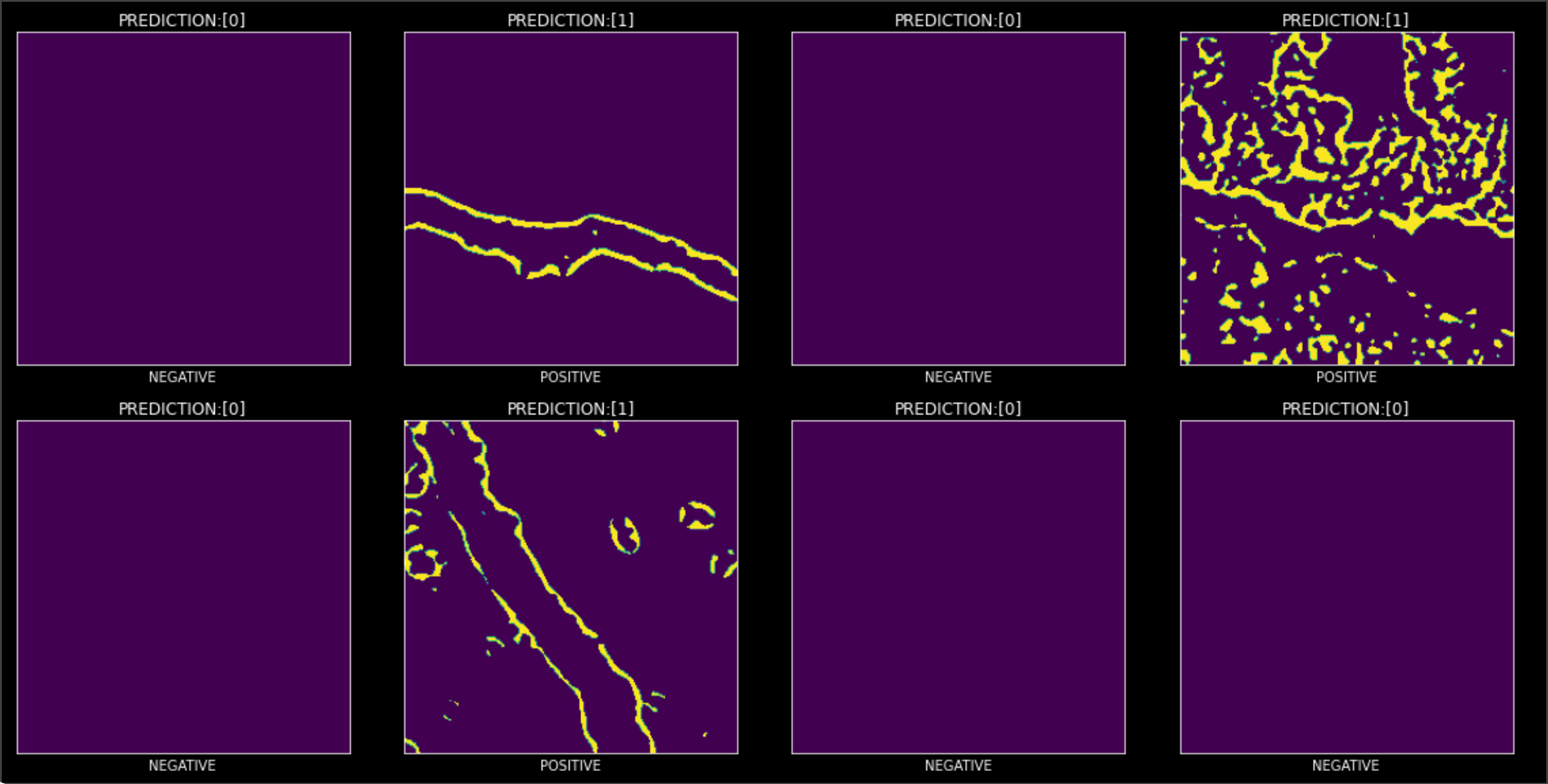# Predictions before Image Processing

Results After Image Processing

Test Loss:
0.13647

Test Accuracy:
97.73%

Predictions After Image Processing

Any Questions?