



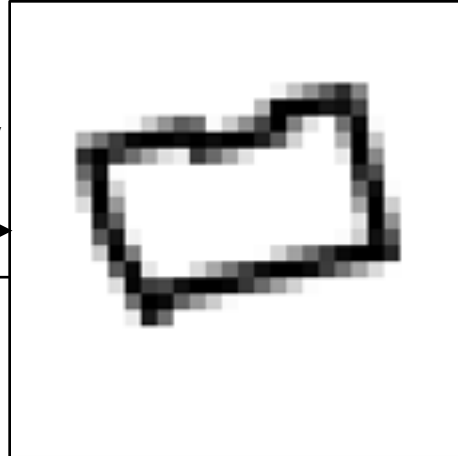
Original Image  
 $224 \times 224 \times 3$

Modified  
VGG-16



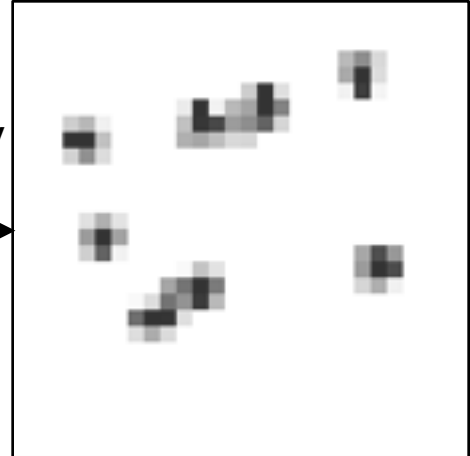
Features  
 $28 \times 28 \times 128$

$3 \times 3$  Conv  
Sigmoid



Mask of Boundary  
 $28 \times 28 \times 1$

$3 \times 3$  Conv  
Sigmoid



Mask of Vertices  
 $28 \times 28 \times 1$

RNN

Loss  
CNN