

# Training Scrabble Letter Object Detection

1. 1200 iterations with grid size: 15x15 -> Test accuracy of 13% (before was 5%)
2. 1200 iterations with grid size: 20x20
  1. Increasing grid size since it seems to be increasing the test accuracy at the moment
  2. Test accuracy of 14%
3. 1200 iterations with grid size: 25x25
  1. Got 16%, maybe if I keep it running for longer it probably would have a higher accuracy
4. 1200 iterations with grid size: 5x5
  1. After doing some research it looks like running with a grid size 5x5 would be better in capturing smaller details like the scrabble board
  2. Very bad results
5. 1200 iterations with grid size: 10x10
  1. Stayed at 10%, no improvement needs augmentation
6. NEW AUGMENTATION IMAGES (104 IMAGES)
  1. Started with 13x13, only 7% at 670 iterations
  2. 15% after 1200 iterations
7. 1200 iterations with grid size: 15x15
  1. 15x15 produced good results with the regular images so we're gonna try this grid size
  2. Produced results of 17%, didn't finish running because it was taking too long
8. 1500 iterations with grid size: 17x17
  1. So far increasing the grid sizes seems to be increasing the accuracy of the model so increased the grid size to 17x17 (will lower if the accuracy goes down)
  2. Was able to get 22%, didn't finish all iterations cause it was taking too long
9. 1600 iterations with grid size: 18x18
  1. Increased the grid size again to follow the trend
  2. Still stayed at 22%, might need more images, or more augmentation settings