

# X-ray Classification Model

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## Overview and Data

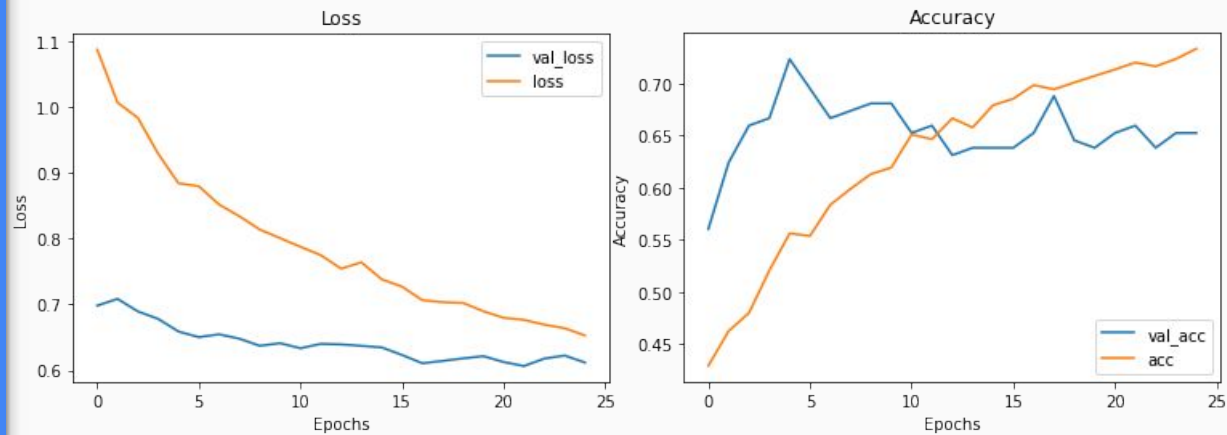
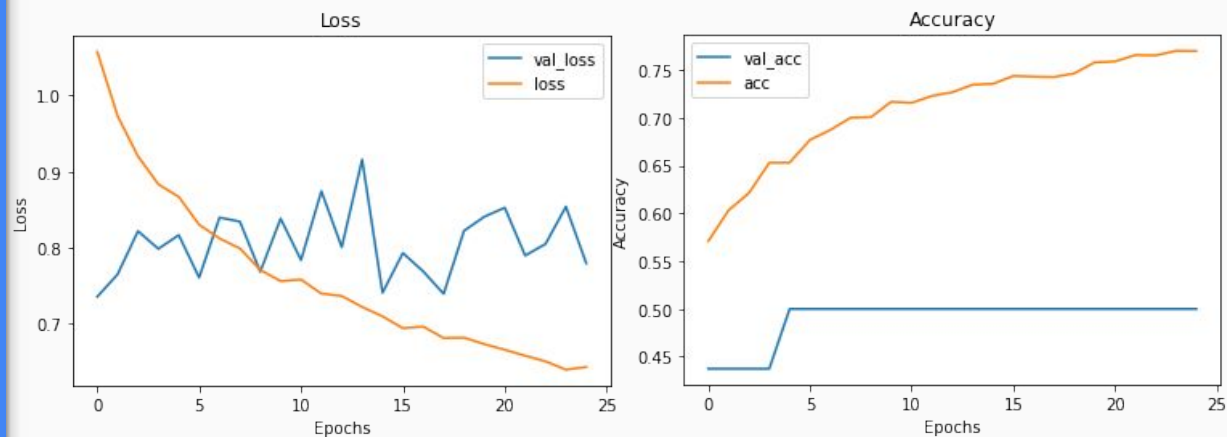
- Build neural network
- Images come from Kernally
  - 5216 images in the training set.
  - 624 images in the test set.
  - 16 images in the validation set.
- Use images to predict whether or not a patient has pneumonia.

# Methods

- Different architectures for neural networks.
- Updated validation set.
- Combat overfitting.
- Find which part of image is being used.

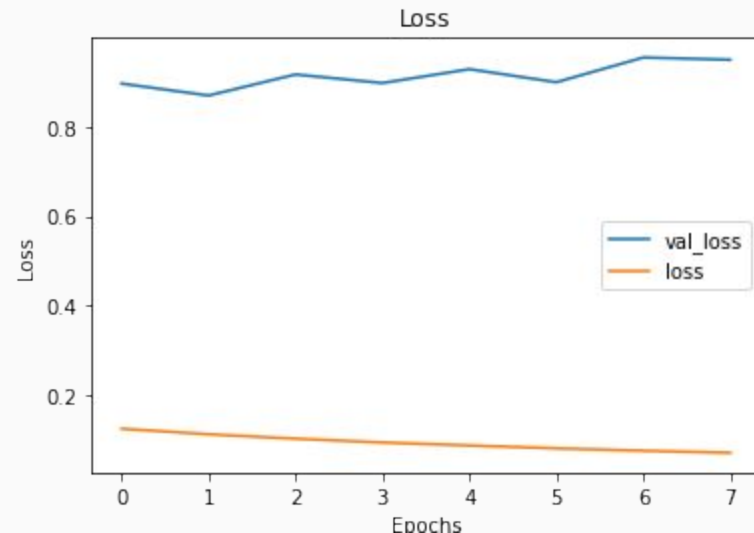
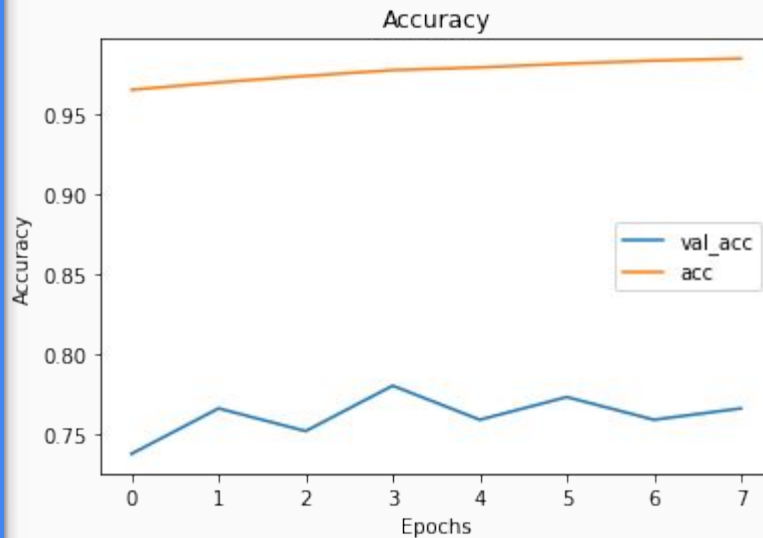
# Results

- Difference between updated validation and pre-updated.



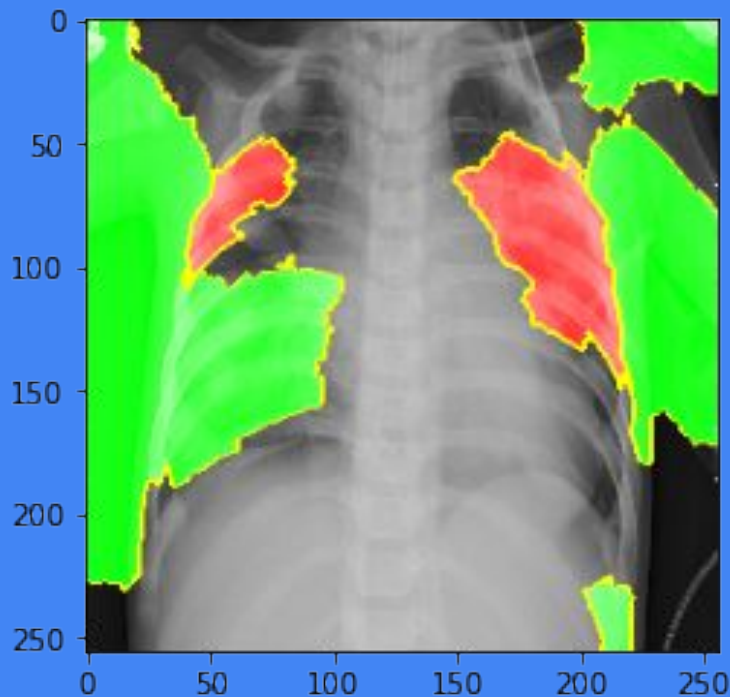
# Results

- Simple residual network did best.
- More complicated residual network too complicated.
- 2,000,000 trainable parameters.
- 78% validation accuracy.
- 59% test accuracy.



# Next Steps

- Add more regularization.
- .Talk to a Radiologist.



# Thanks!

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