

X-ray classification project

b



Business Problem

- A radiologist classifies x-rays as Pneumonia or normal.
- 

Data Understanding

- 5,856 chest x-ray images.
- Each image is labelled as either normal or pneumonia.
- 25% of the images are labelled normal and 75% pneumonia.

Models

- Baseline:
 - a neural network with 1 hidden layer, with 64 neurons.
- 2nd model with added layer
- 3rd model with higher learning-rate



Validation and training accuracies

Baseline model	Model 2	Model 3
85%	87%	82%
86%	86%	86%

Results/conclusions

- 88% accuracy compared to 73%
- 105 false negatives 70 false positives out of 1464 predictions.
- this model can be used as a check by the radiologist

