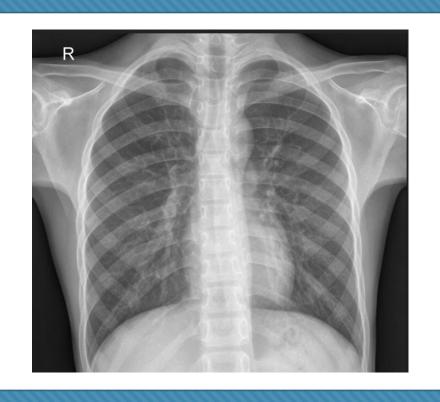
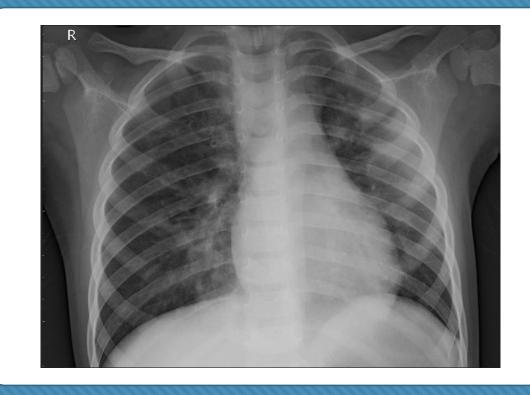
# module 4 final project

ASAD RAHMAN





# **PROJECT AIMS**

Increase efficiency in Pneumonia detection in X-rays

### METHODOLOGY



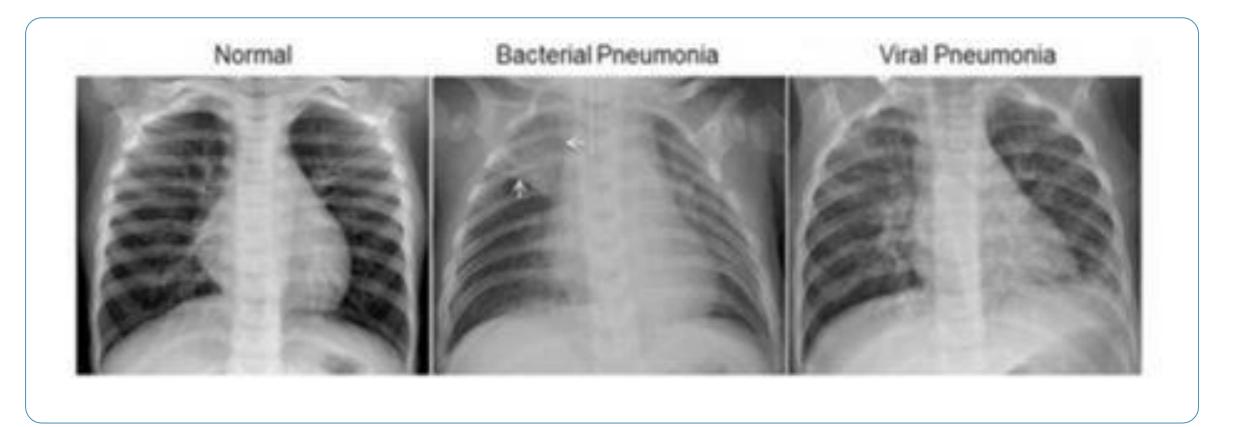
DATASET: 5,863 X-Rays



CREATE and TEST MODEL



IMPROVE MODEL with OPTIMIZATION



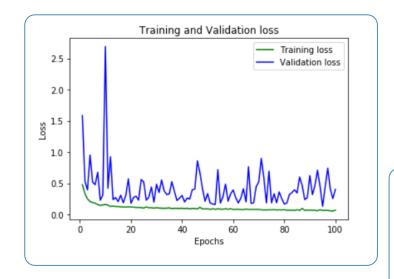
### THE DATA

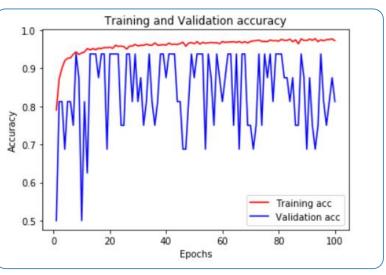
- Pediatric patients
- One to Five years of age
- O Guangzhou Women and Children's Medical Center

### **NEURAL NETWORK:**

### **BASELINE MODEL**

- Base Keras model obtained 98% accuracy on training images
- Only 74% accuracy on testing images

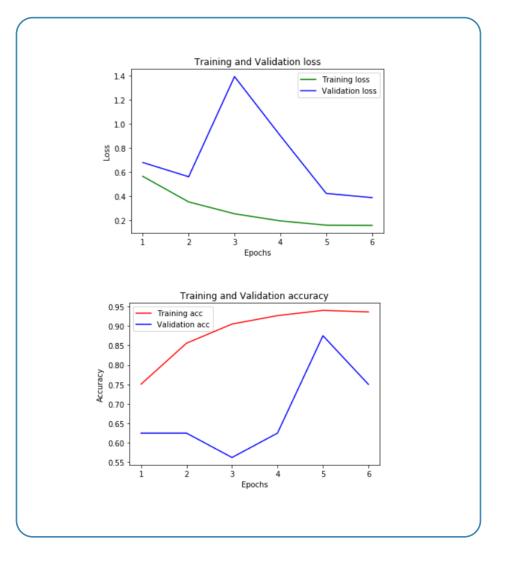




# Convolutional Neural Network

- Testing image accuracy 80%
  - 6% increase on individual subtleties

Greater usability with newer images



# Future Recommendations







OPTIMIZE NEURAL NETWORK INCREASE TESTING
TIME

INCREASE TESTING
DATA SEST

# Thank You