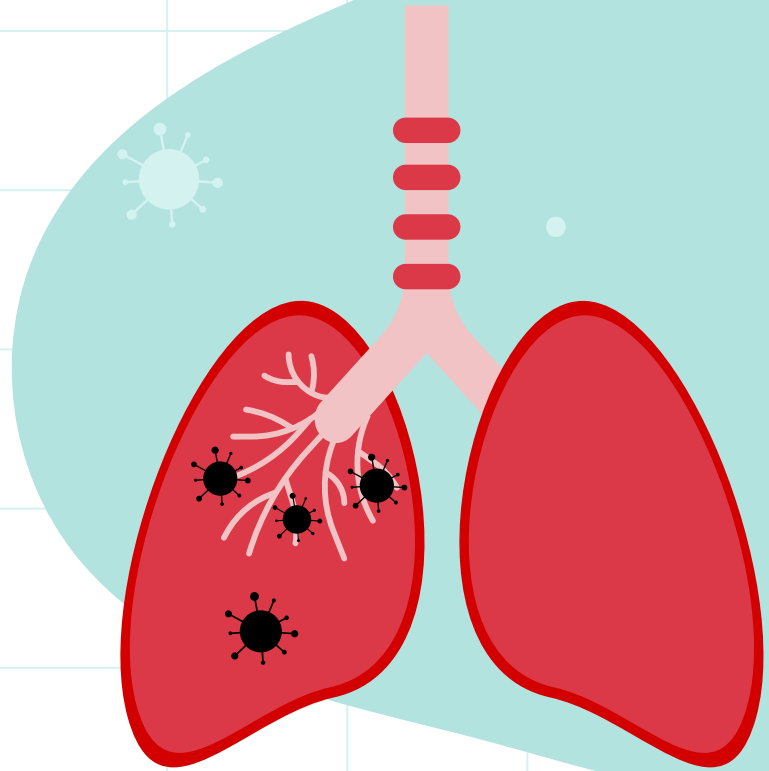


# NEW TOOLS FOR PNEUMONIA DIAGNOSIS

Flatiron Health Technology



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01

# PNEUMONIA

What you need to know and why it's so serious

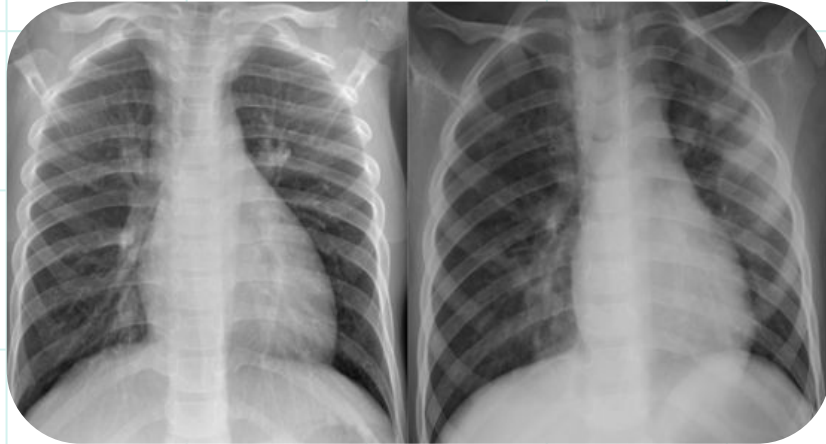


# DIAGNOSIS

Chest X-ray

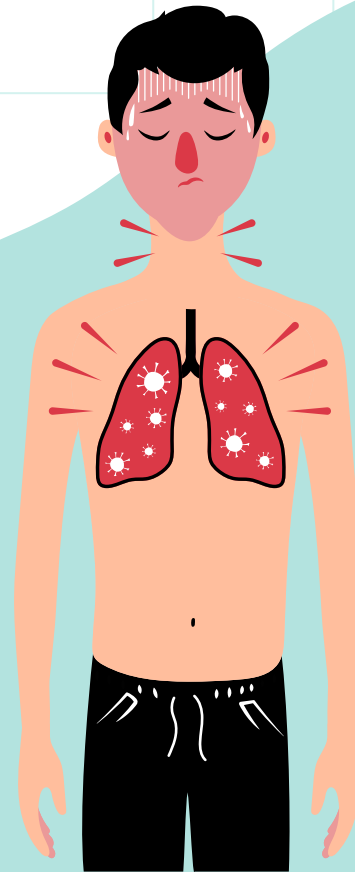


# THE DATA

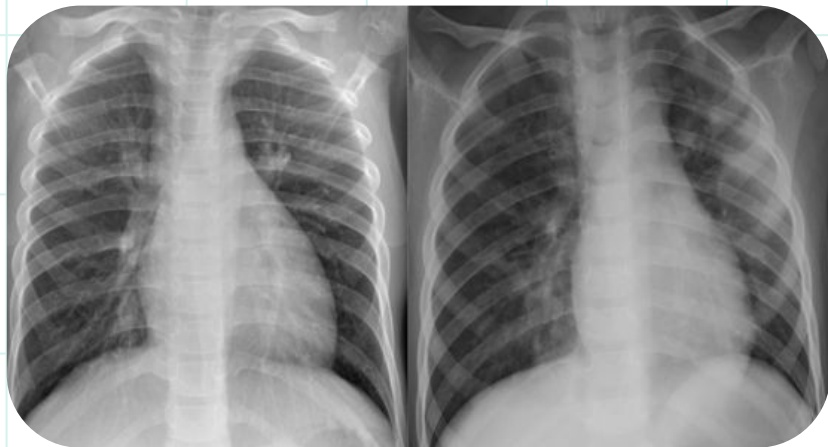


## 5,863 PEDIATRIC CHEST X-RAYS

Compiled by a team from the University of California, San Diego and the Guangzhou Women and Children's Medical Center



# THE DATA

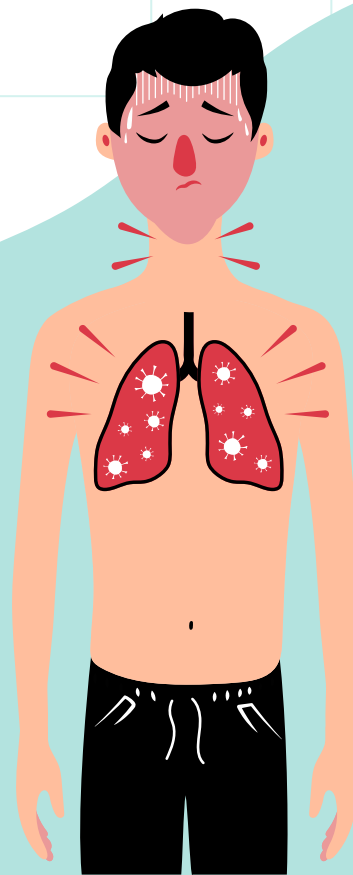


Healthy

Pneumonia

## 5,863 PEDIATRIC CHEST X-RAYS

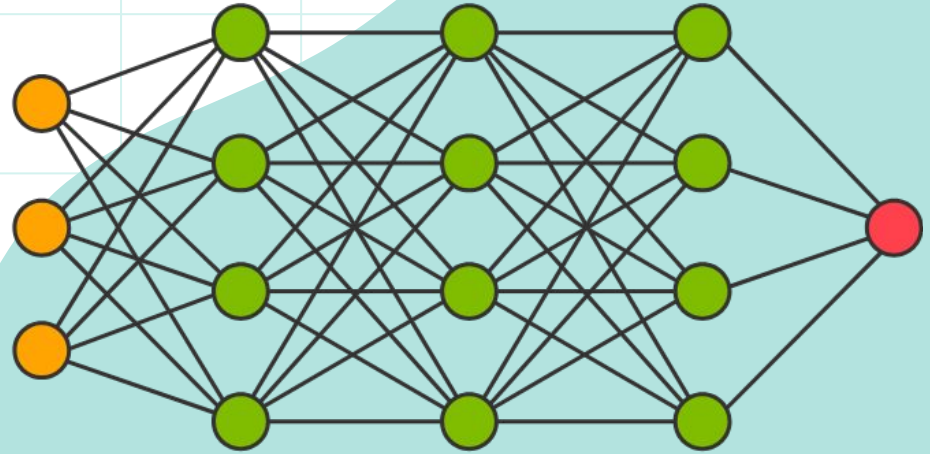
Compiled by a team from the University of California, San Diego and the Guangzhou Women and Children's Medical Center



# MODELING

## DUMMY SCORES

- Recall: 100
- Accuracy: 75



# MODELING

## ASPECTS WE TUNED

- Convolutional
- Regularization
- Learning rate
- Image augmentation
- Resolution





# RESULTS

## VALIDATION SCORES:

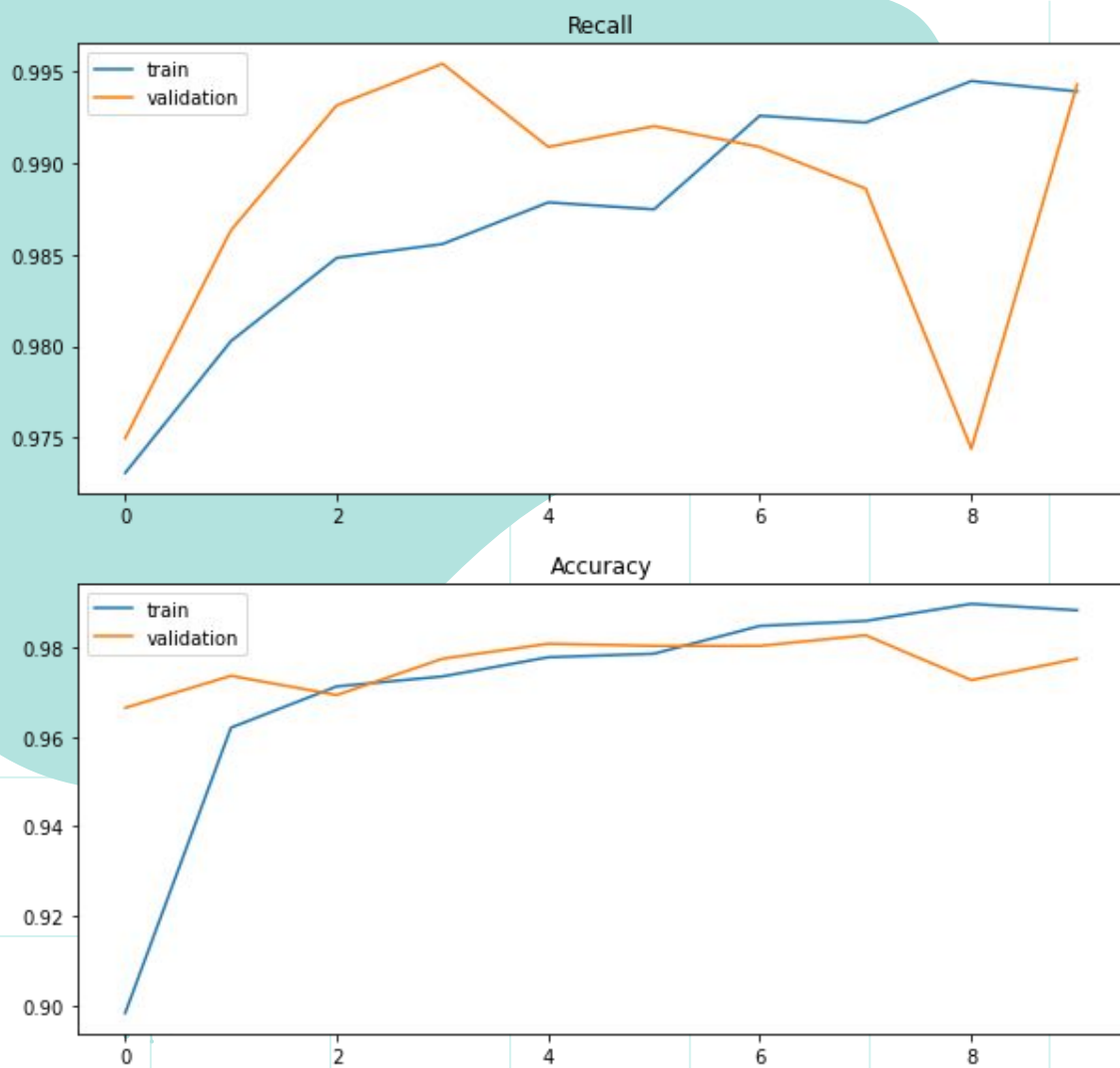
RECALL: 99.54

ACCURACY: 97.75

## TEST SCORES:

RECALL: 100

ACCURACY: 77.28





# NEXT STEPS

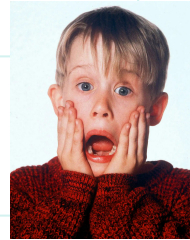
- Improving workflow
- Viral vs bacterial
- Broader Dataset



# THANKS!



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