

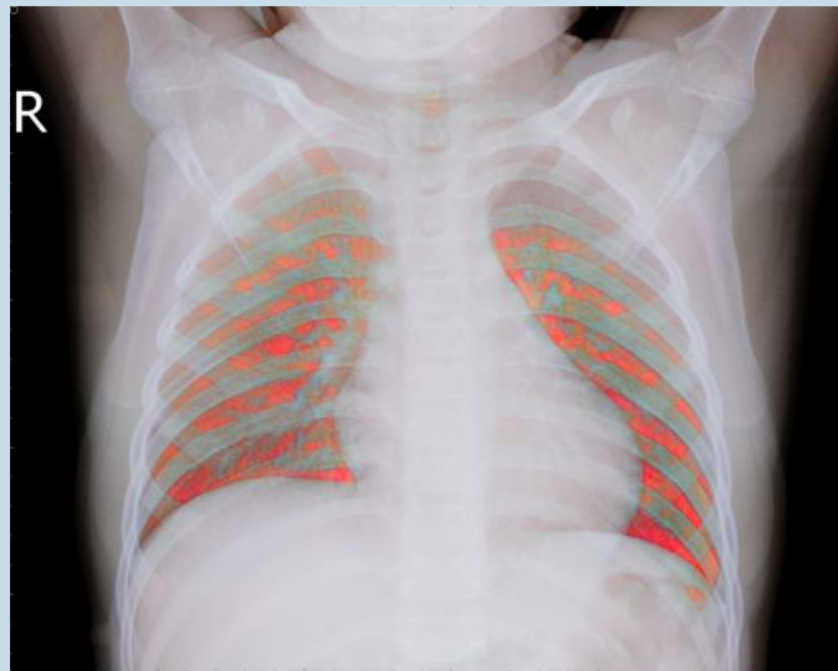
# In Living Color

Erica Gabriel

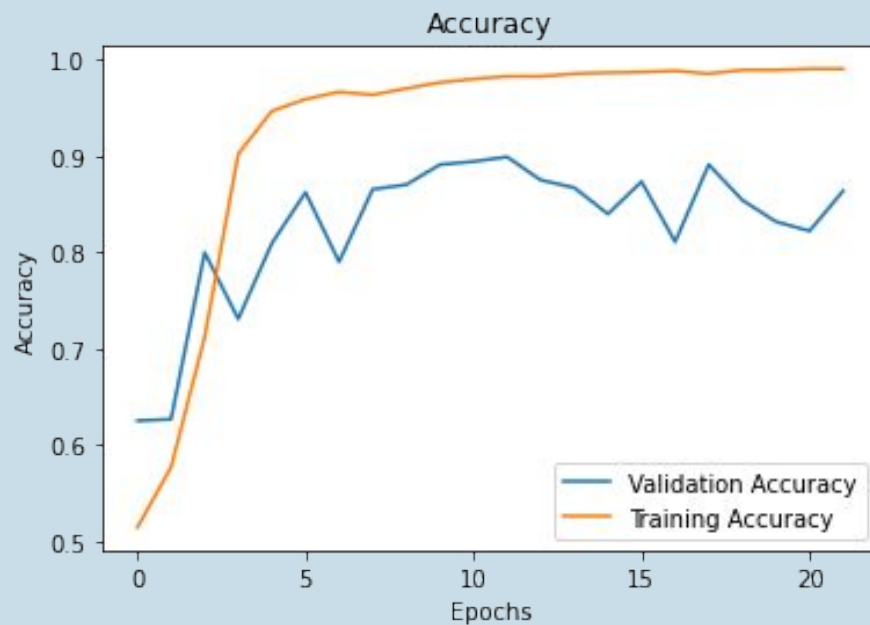
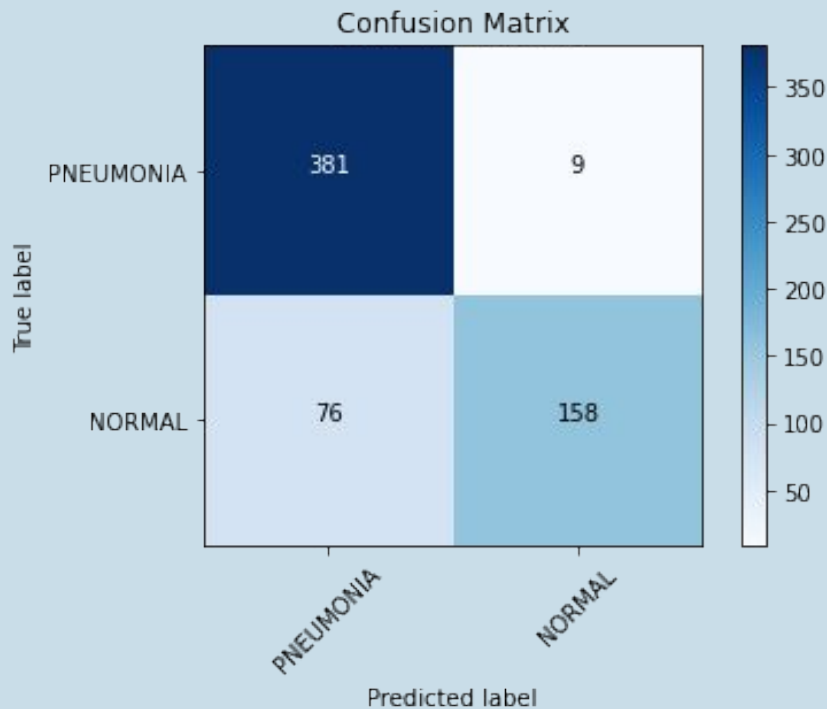
# Business Case



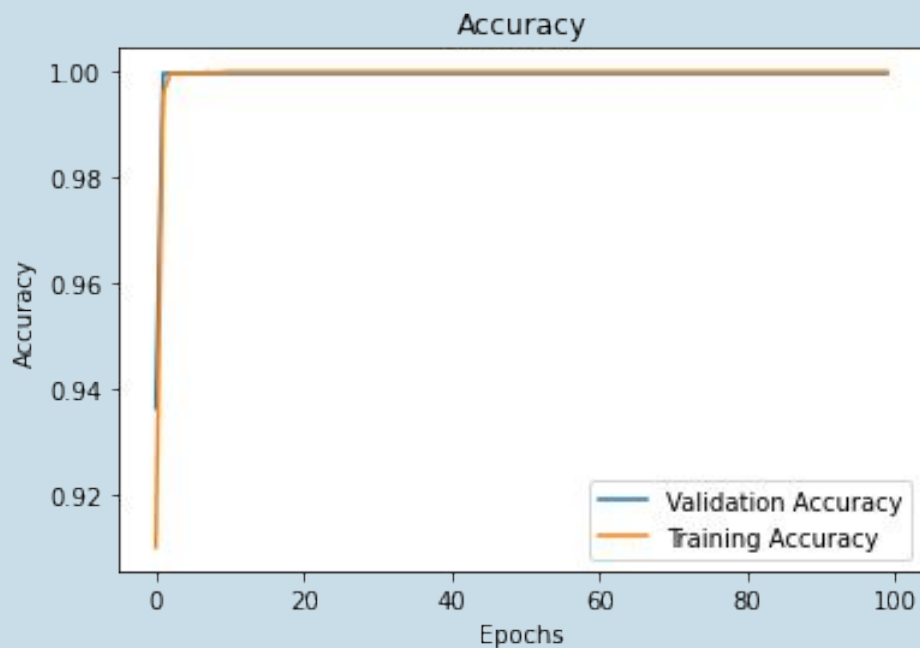
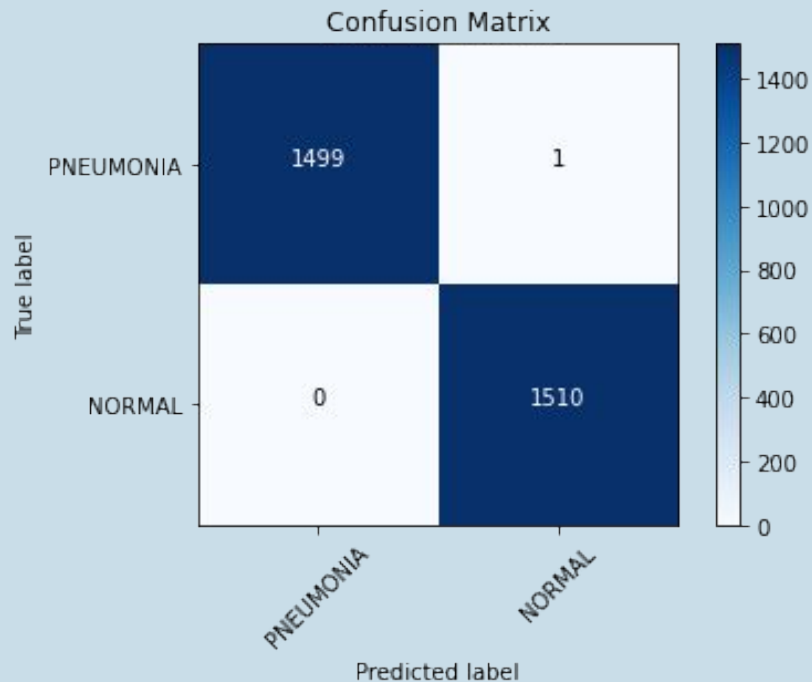
Greyscale  $\longrightarrow$  Color



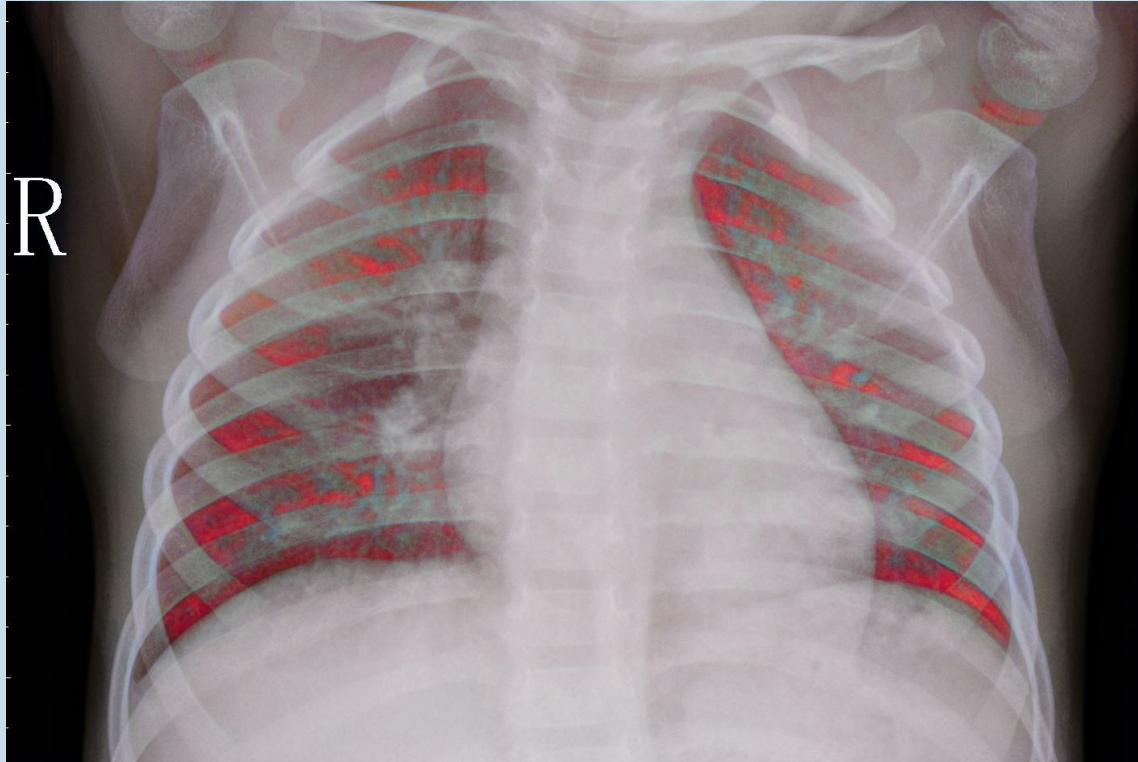
# Greyscale Model & X-Rays



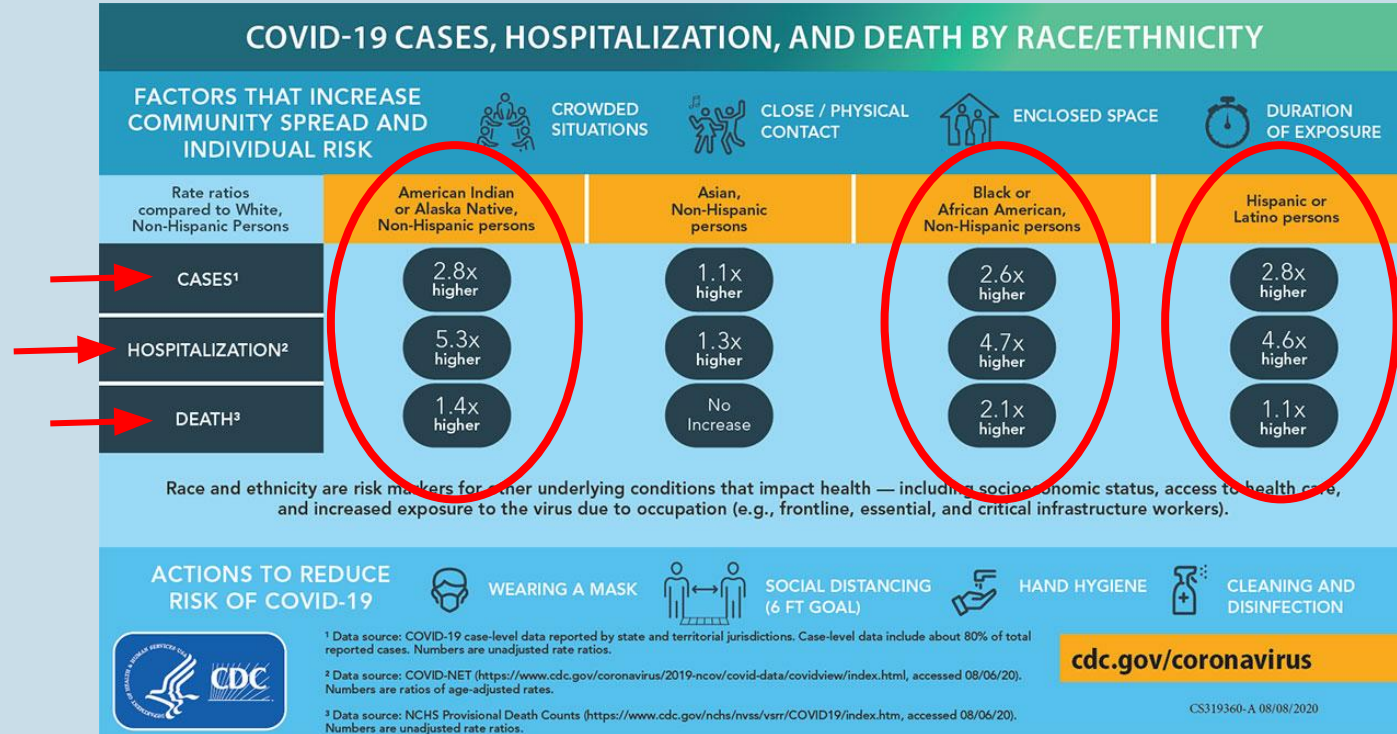
# Colorized X-Rays & Model



Who's More Prone to being Infected with Pneumonia?



# Pneumonia, COVID-19 & Vaccination Coverage





# Why are African Americans More Likely to Refuse Medical Treatment?





# Insights and Recommendations

- Equipment & Technology for Coloring X-Rays, CT Scans, etc. should be strongly considered in medical research to reduce the rate of medical diagnosis
- The 9 surveillance areas for pneumonia should be shifted to prioritize largest groups of minorities:
  - a. Black Americans
  - b. American Indian/Alaska Native
  - c. Hispanic/Latino
- Clinicians should look to trial an approved and successful vaccination for COVID-19 on Pneumonia patients as well
- In order to have a successful COVID-19 or Pneumonia Vaccine, medical officials should include an ethical and transparent plan to gain Black Americans' trust

- Build an object detection model and train Fast Region Based CNN (Fast R-CNN) to aid in higher inflammation & abnormality detection accuracy
- Perfect deOldify (Image Colorization Library and Repo) to more closely imitate the colors of the body internally



