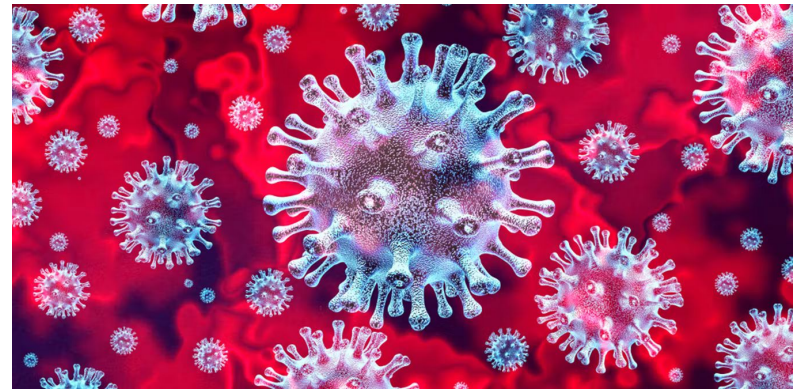


Predicting COVID19 Mortality With Diverse Data Sources

Flatiron School Capstone
Adonis McQueen, Ph.D

COVID19 and Mortality Rates

- ❖ 5.1 million deaths
- ❖ Vaccinations reduce disease severity



Theconversation.com, 2021

Project Aims

- ❖ Medical data has many diverse features
- ❖ We seek to answer the question:

Can mortality probability be predicted via machine learning from patient data and X-Ray images?

Data Sources and Content

- ❖ Images and patient data from Cancer Image archive
- ❖ Images enhanced posted to Kaggle

Can you tell the difference?

Which one survived?



Convolutional Neural Networks

Model accuracy:
61.2%



KNN model for mortality prediction

W/out X-ray predictions: Acc = 91.6%



With X-ray predictions: Acc = 92.5%



Conclusions and future directions

- ❖ Models can assist medical practitioners
- ❖ More processing power can improve models

THANK YOU AND STAY SAFE!

- ❖ Adonis McQueen, Ph.D
 - [Github](#)
 - [LinkedIn](#)