School of Al Global Health Hackathon

GROUP IMAGO

CARLA FURONI: BUSINESS FABRICIO DITZZ: HEALTH

GUILHERME FOLEGO: AI

ISABELA LAULETTA: DESIGN VICTORIA DEORIO: DEV



 Approximately 400 million diagnostic medical examinations and 150 million dental X-ray examinations are performed annually in the United States. [1]

• It is estimated that some 3.6 billion diagnostic X-ray examinations are performed every year in the world. [2]

² https://www.omicsonline.org/open-access/radiation-exposure-of-patients-undergoing-common-diagnostic-x-ray-examinations-in-some-major-hospitals-in-visakhapatnam,-india-2168-9784.1000101.php?aid=6363



¹ https://www.paho.org/hq/index.php?option=com_content&view=article&id=7410:2012-dia-radiografia-dos-tercios-poblacion-mundial-no-tiene-acceso-diagnostico-imagen<emid=1926&lang=en

What can be done to help prioritize X-ray analysis?

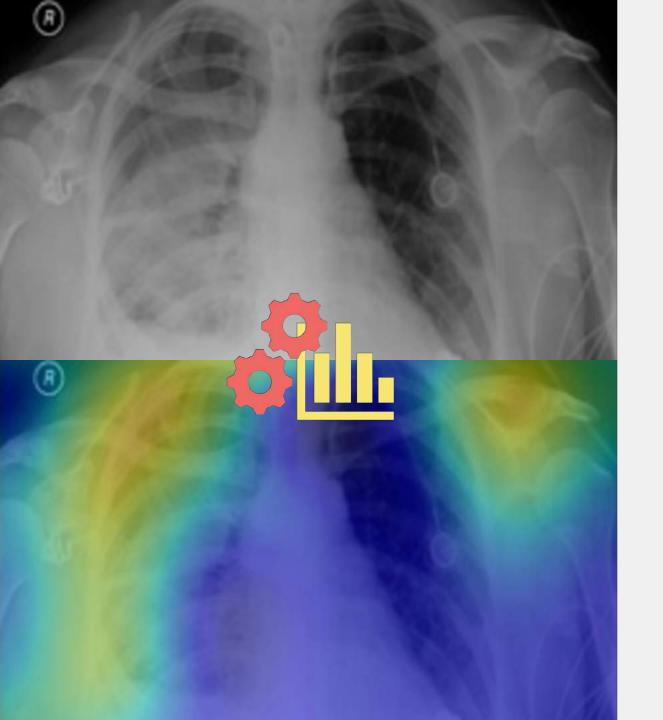
What can be done to identify which x-rays that present some pathology, optimizing the use of specialists?

Do all x-rays require the analysis of a specialist or can they be analyzed by a general physicist?





Medical image analysis platform



What?

Computer aided diagnosis for general physician

How?



that the x-ray
has a
pathology



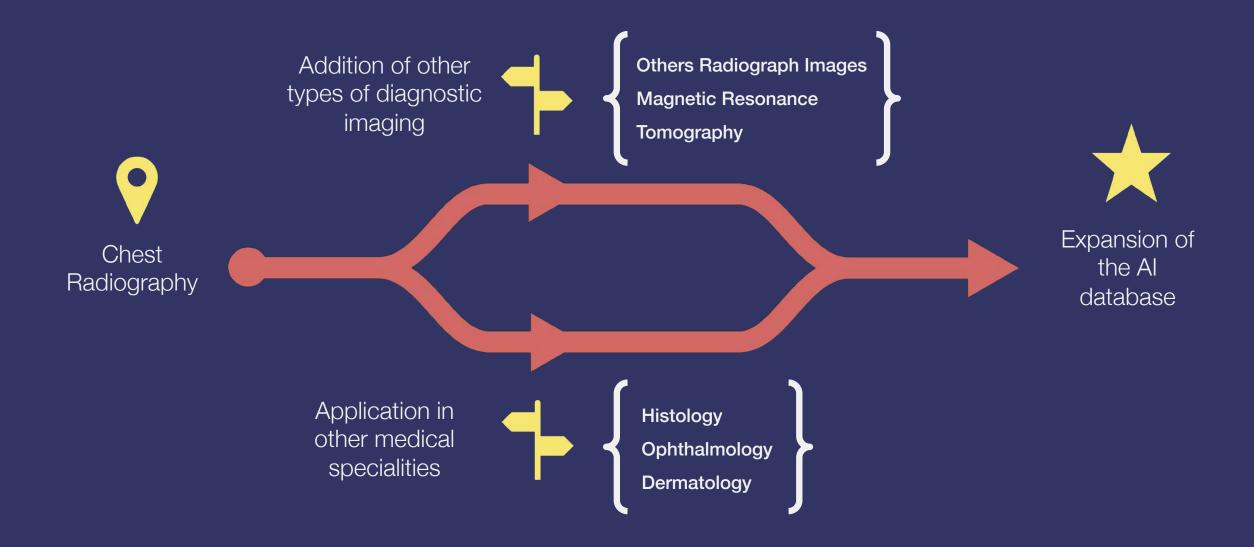
Monetization



Market Competitors



Roadmap













Technology



- Deep learning for classification of 14 potential pathologies
- Adaptation of MobileNet V2 convolutional neural network with Grad-CAM technique for visualization









Result: 99.26 %

