Deep Learning of Chest X-Ray of Covid-19 Patients

Question/need:

- What is the framing question of your analysis, or the purpose of the model/system you plan to build?
  - **Diagnosis of Normal patients and patients with Pneumonia (Bacterial , Viral) with chest X-rays. [2 categories]**
- Who benefits from exploring this question or building this model/system?
  - **Hospitals and medical team of the hospital in order to increase diagnosis response.**

Data Description:

- What dataset(s) do you plan to use, and how will you obtain the data?
  - **Kaggle dataset of Chest X-Ray Images (Pneumonia)**
- What is an individual sample/unit of analysis in this project? What characteristics/features do you expect to work with?
  - **Chest X-ray images (anterior-posterior) were selected from retrospective cohorts of pediatric patients of one to five years old from Guangzhou Women and Children's Medical Center, Guangzhou.**
- If modeling, what will you predict as your target?
  - **Image classification of the chest X-rays**
    - **NN for baseline**
    - **CNN**

Tools:

- How do you intend to meet the tools requirement of the project?
  - **Pandas, numpy, seaborn, tensor flow, PyTorch, keras, matplotlib**
- Are you planning in advance to need or use additional tools beyond those required?
  - **Probably not.**

MVP Goal:

- What would a minimum viable product (MVP) look like for this project?
  - **MVP: Classification of the chest X-ray of patients diagnose with Pneumonia using deep learning algorithms .**