# VinBigData Project Challenge

# Introduction to the VinBigData Challenge and data

nature › scientific data › data descriptors › article

Data Descriptor | Open access | Published: 20 July 2022

## VinDr-CXR: An open dataset of chest X-rays with radiologist's annotations

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## VinBigData Chest X-ray Abnormalities Detection

Automatically localize and classify thoracic abnormalities from chest radiographs

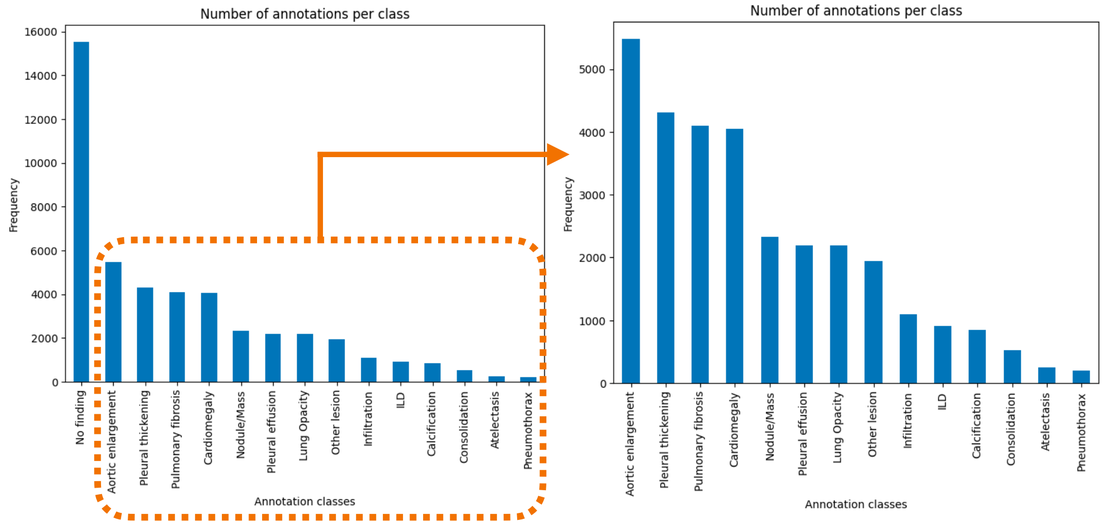
**Scope:** **Improve detection of pulmonary diseases 🫁 (including outliers such objects) through AI**

**Dataset size:** **15k 🩻 (57.2% train - 42.8% test)**

*Total of 45925 annotations in training (multiple annotations per image) and 21989 in test*

**Dataset labels:** **14 abnormalities Labels + No Finding**

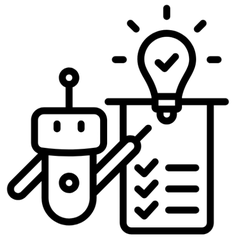
**Clearly unbalanced data!**



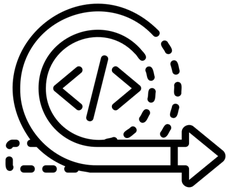
# Strategy I

## The simplest the best

Start from the ground and build from that



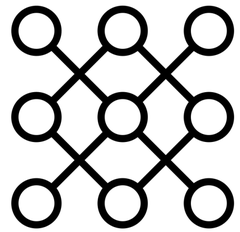
## Explainability first



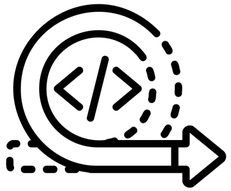
## Agile methodology

# Strategy II

Final Model

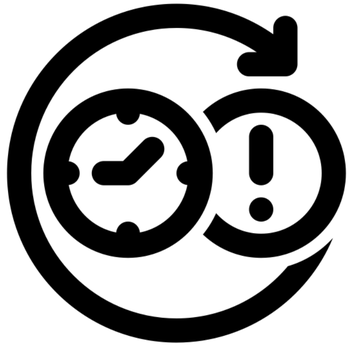




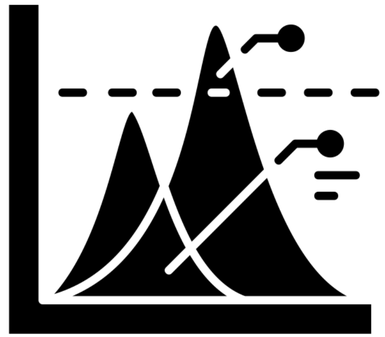



**2 models to achieve the better performance**

# Challenges and Limitations

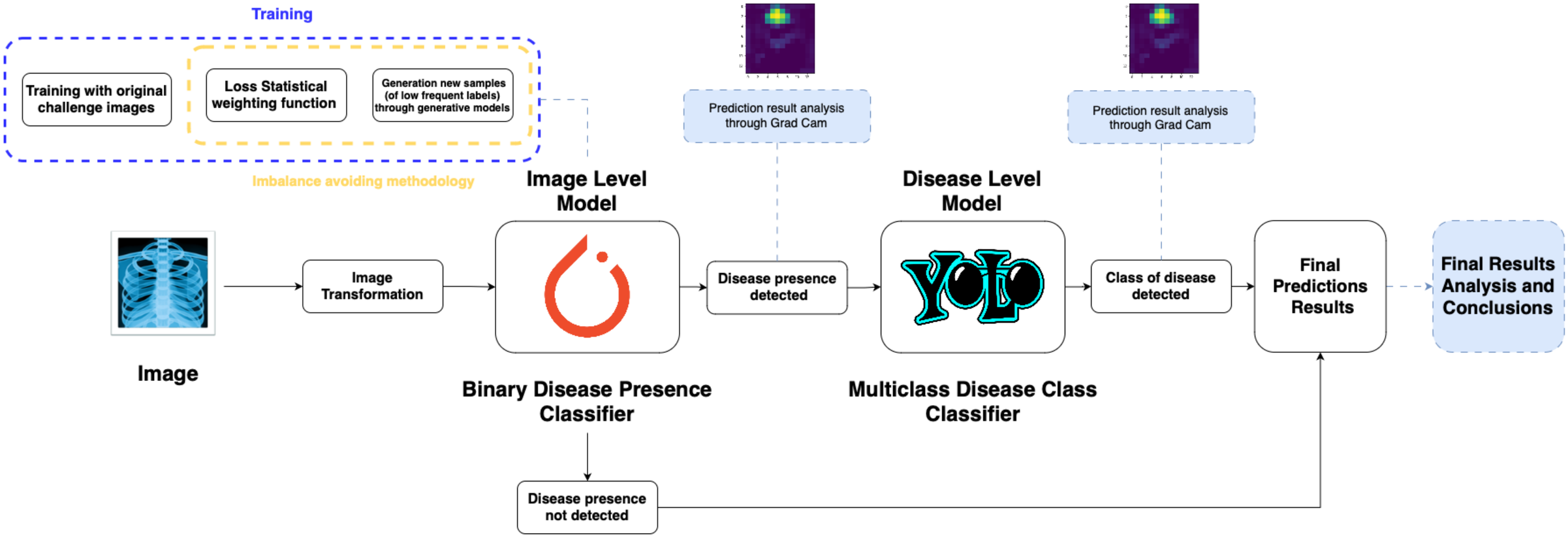


**GPU Time Limit**



**Sophisticated metrics**

# Upcoming Steps



# VinBigData Challenge 🫁

# Thank you!