

Paper Title and Link:

Comparative Analysis of Federated Learning and Centralized Approach for Detecting Different Lung Diseases

<https://dl.acm.org/doi/abs/10.1145/3605423.3605433>

Motivation:

To keep healthcare sector's data scarcity, data dispersed across multiple organizations, and patient and hospital confidentiality

Contribution:

1. FL-based and non-FL-based models' comparison after comprehensive analysis
2. A new ensemble model using 3 other ML models

Methodology:

The work was divided into 2 parts for the purpose of comparison.

1. They compared FL and no-FL based approaches
2. They compared sequential and ensembled model for both approaches

Liked in their research processes:

EDA, analysis for 2 models for comparing FL and non-FL

Shortcomings or limitations identified in their work:

There are other models that can be ensembled but they only worked with VGG19, Inception and DenseNet.

Future Work:

Worked with 2 diseases' datasets more options are available.