# Binary Classifier for Chest X-Ray

We tried:

- Pretrained Vision Transformer
- ResNet (Baseline)
- DenseNet[1] (we hit gold)

Federated training a DenseNet in under 20 minutes is hard. So we tried:

- Different federated strategies (FedAvg, FedBN)
- Different different batch sizes, learning rates

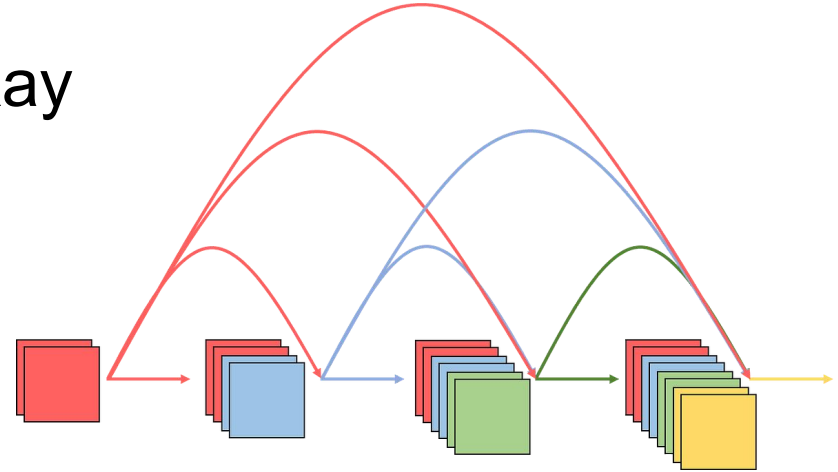

*Fig 1: DenseNet architecture example*

**Result:**

AUROC of **0.7760** on evaluate.py with:

*512 batch size, 6 rounds, 1 epoch per round*

kept early DenseNet layers frozen as feature extractor, updated the last blocks + classifier

[1] *https://www.researchgate.net/publication/306885833_Densely_Connected_Convolutional_Networks*