## **Conclusion**

In conclusion, deep learning models showed great promise for pneumonia detection, achieving high accuracy, sensitivity, and specificity in different datasets EfficientNet is a promising framework that can improve detection model accuracy and performance time using fewer parameters and computer resources An accuracy of 99.43% in the lung infection detection task is considered a highly impressive result.

Furthermore, the performance of the model should be evaluated on separate test data, validated by expert review, and compared with other existing methods for lung disease detection.

Overall, deep learning models have the potential to significantly improve the accuracy and efficiency of pneumonia diagnosis, leading to more accurate diagnosis and improved patient outcomes but continued research and development is needed to further improve the performance of these models and ensure their safety and reliability in clinical settings.

Moreover, the model is deployed with the help or streamlit as a web application.