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Using artificial intelligence to interpret pneumonia CXR (chest X ray) findings in children with a phone application platform

R. Thompson, J. Li, K. Wang, L. Etter, I. Camelo, I. Castro-Aragon, B. Setty, H. Chang, M. Betke, R. Pieciak, C. Gill. 2022. "Using Artificial Intelligence to Interpret Pneumonia CXR (chest X ray) Findings in Children with a Phone Application Platform"

<https://hdl.handle.net/2144/46074>

"Downloaded from OpenBU. Boston University's institutional repository."

ResNet-50 convolutional neural network to sort, process it and categorize (no pneumonia) or abnormal (pneumonia).

To minimize processing requirements, the model was optimized for mobile deployment.

Tensor Flow Lite (TF Lite) Task Lib interfaces are designed for each task to achieve the best performance and usability when used in a simulated mobile application.

This allows the model to classify X-rays through the App using the phones' camera.