Clinical Challenges
- Detecting pneumonia can be difficult for radiologists - the appearance of pneumonia in X-ray images is often vague, can overlap with other diagnoses and can mimic other benign abnormalities
- Inter/Intra observer variability
- Each image may contain a large amount of regions of interest, which is hard for a radiologist to interpret without a ideal retrieval system
- Radiologists must make diagnoses despite suboptimal image quality, and CNNs have gained a reputation at performing well even when variability is present
- Radiologists may make mistakes even when they have experienced long-term clinical training and professional guidance