

CLIENT PROBLEM

A leading AI research platform needed high-quality, bias-mitigated chest X-ray annotations to accelerate the development of COVID-19 diagnostic tools. Public datasets lacked the precision necessary for training models in high-stakes clinical settings, and prior attempts introduced systemic bias, limiting model reliability and adoption in real-world healthcare environments.

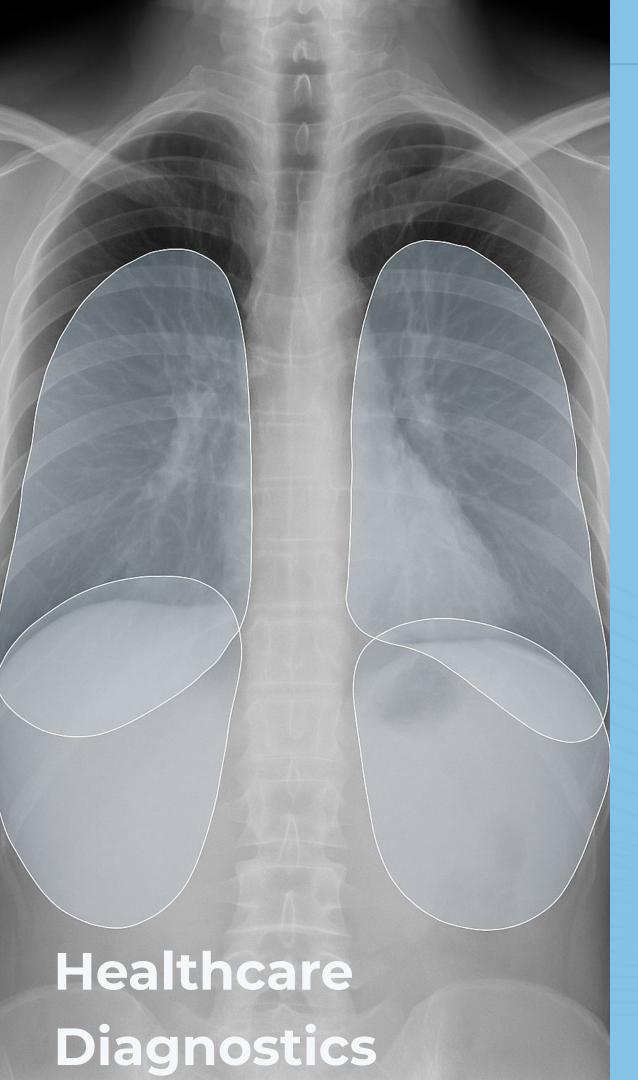
WHAT WE DID

CloudFactory partnered with V7 Labs to deliver a fully annotated chest X-ray dataset with high clinical relevance. Our managed workforce provided over 12,000 precise lung segmentations across 6,500 images, masking out confounding anatomical structures such as the ribs and heart. This ensured models trained on the dataset focused on pulmonary features. We also mobilized teams rapidly to support urgent pandemic research timelines.



RESULTS + VALUE

The dataset enabled rapid development of less biased, clinically viable COVID-19 diagnostic models. It became a trusted open resource for researchers worldwide, accelerating the creation of safer, more accurate medical AI.



KEY TECHNIQUES

- Bias-Mitigated Annotation Strategy: We segmented only lung regions—excluding ribs, heart, and diaphragm—to prevent AI models from learning irrelevant visual cues, reducing systemic bias in diagnostic outputs.
- Medical-Grade Quality Assurance: Our teams followed strict QA protocols with multi-step validation to ensure pixel-level accuracy in lung segmentations, supporting clinical-grade AI reliability.
- Rapid Pandemic Response: We mobilized and trained specialized annotation teams in days, enabling researchers to access a high-quality dataset when time was critical.
- Open Research Enablement: By supporting the public release of the annotated dataset, we accelerated collaborative AI development across global research institutions.