KFBIO

technology for health.

intel

11.4X faster

inferencing for PyTorch 1.6 with integrated oneDNN[1]

88.9% accuracy

in specimen classification for Tuberculosis diagnosis[2]

KFBIO Accelerates Mycobacterium Tuberculosis Detection with Intel® AI

While Ningbo Konfoong Bioinformation Co., Ltd (KFBIO) had an effective Deep Learning (DL) solution for scanning mycobacterium tuberculosis (M. tb) using GPUs, their engineers needed to complete scanning and diagnosis faster. Collaborating with Intel, KFBIO optimized their code based on PyTorch and the detectron2 model to take advantage of 2nd Gen Intel® Xeon® Scalable processors with Intel® Deep Learning Boost. KFBIO successfully deployed their screening solution at Shanghai Public Health Clinical Center (SPHCC) to accelerate processing of TB diagnosis caseloads. According to SPHCC, the system delivers 86.8 percent average precision in detection and 88.9 percent accuracy in classification.[2] The entire workflow pipeline can be completed in less than 80 seconds for a single-case diagnosis from input of specimen to output of report.[3]

Products and Solutions
2nd Gen Intel® Xeon® Scalable Processors
Intel® Deep Learning Boost
Intel® oneAPI Deep Neural Networks Library

Industry
Health & Life Sciences

Organization Size
51-200

Country
China

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Case Study