



*“With regards to open source initiatives like COVID-Net CT, there’s a significant cost-benefit for practitioners and hospitals to leverage existing hardware and run the system on Intel® processors. To this end, clinicians and academics have realized substantial efficiency gains by deploying the system through Intel® Distribution of OpenVINO™, and we’ve been thrilled to partner with Intel in making COVID-Net CT available to front-line and hospital workers using Intel processors. Our collaboration has been one of the highlights during these challenging times.”*

Sheldon Fernandez  
CEO at DarwinAI



As the COVID-19 pandemic took hold, the medical community reported one of the largest bottlenecks was in triage and diagnosis of COVID-19. In response, DarwinAI collaborated with researchers at the University of Waterloo to develop COVID-Net CT as a complementary tool to assist clinicians in rapidly screening for COVID-19 and assessing disease progression and severity.

DarwinAI developed COVID-Net CT and COVID-Net CT-2 as AI-powered solutions-when there was a low supply of testing instruments. COVID-Net CT and COVID-Net CT-2 are tailored deep convolutional neural network catered specifically for the purpose of COVID-19 detection from chest CT images. These AI-powered solutions work in a way that satisfies sensitivity and positive predictive value requirements, while also minimizing computational and architectural complexity to enable widespread adoption in clinical environments where computing resources may be limited. DarwinAI leveraged the Intel® Distribution of OpenVINO™ toolkit and Intel® Core™ i7 processors in order to optimize the COVID-Net models for deployment in hospitals using Intel® processors.

DarwinAI’s internal testing found that COVID-Net CT-2 is capable of quickly identifying COVID-19 infections with a 98.1% accuracy rate<sup>1</sup> This allows radiologists the ability to diagnose greater number of patients.

# AI solution identifies COVID-19 infections

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1. Based on DarwinAI test results.

