



Clara CT: Overview

Clara: Open Compute Platform for Intelligent Medical Instruments

Scalable hardware solutions and SDKs that accelerate and virtualize the most advanced medical applications from embedded to the data center to the cloud.

OVERVIEW

There is a huge installed base of approximately 3 million medical imaging instruments, such as CT scanners, installed around the world which allow doctors to detect and diagnose a wide range of conditions. What we are showing in this demo is that by using the Clara SDK and the incredible computational power of GPUs, you can dramatically improve the image quality and visualization.

This is done by taking the raw output from even older generation machines and using techniques like ray tracing to create a cinematic-quality 3D image of the internals of the human body. These renderings are not only visually compelling but are easy for anyone to understand interpret.

And by using deep learning, GPUs can even automatically detect and classify certain conditions or make other measurements such as the volume of blood flow through the heart.

KEY POINTS

- Leveraging NVIDIA libraries for medical image processing allows access to the most advanced methods for reconstruction, segmentation, visualization, and AI.



- Decoupling image processing from the medical device allows for a flexible and cost-effective upgrade cycle plus consolidating of computation.
- Clara SDK is containerized and can be run on a local machine, an on-premises data center or in the cloud using NVIDIA GPU Cloud (NGC).

