Improving Medical Imaging Diagnostics with Next-Gen AI

Technologically advanced medical imaging that uses powerful, unsupervised machine learning for seamless diagnosis and improved patient care in clinical workflows and unprecedented insights for research and discovery
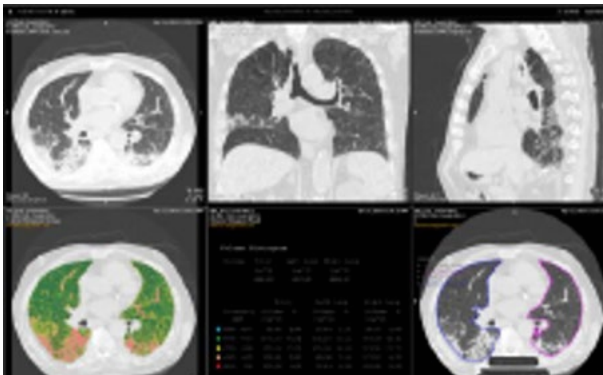

TeraRecon Intuition advanced imaging platform

Overview

SymphonyAI Group Government Solutions offers the world's most mature and technologically comprehensive solution for machine learning-based diagnostic capabilities in medical imaging. This is possible through a combination of industry-leading technologies from the Symphony AyasdiAI, Concerto HealthAI, and TeraRecon portfolio companies.

Powerful, Next-Gen Imaging

The imaging solution cornerstone is TeraRecon's AI-based, certified, and accredited Intuition and Eureka technologies. Intuition is used at over 900 health systems globally, including the US

TeraRecon Eureka AI Results Explorer

Veteran's Administration and the Defense Health Agency and Britain's Nation Health Service. TeraRecon's state-of-the-art visualization technology is aided by an extensive AI model ecosystem with 30 deployment-ready algorithms, 20 of which are FDA 510(k) cleared.

Explainable AI

The advanced imaging solution uses Symphony AyasdiAI unsupervised machine learning technology borne out of DARPA and National Science Foundation funding. The Symphony AyasdiAI platform uses explainable AI that is widely recognized for rapid model development and insights in large data sets for use cases across healthcare, fintech, defense, cybersecurity, and scientific research. Symphony AyasdiAI technology has been called "one of the top 10 innovations developed at DARPA in the last decade," by DARPA director Tony Tether.

The solution marries together the leading explainable AI platform and the leading imaging AI platform together with first-party and best-of-breed third-party algorithms to deliver the most precise and accurate predictive health solutions.
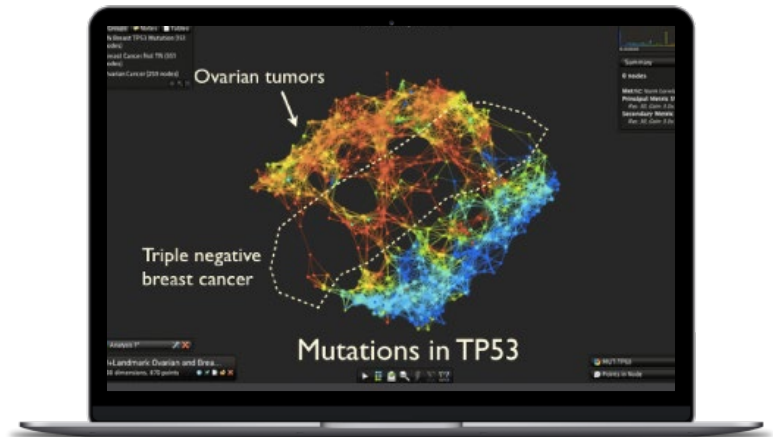
Clinical Outcomes Insights

Concerto HealthAI, the leader in real-world data and AI solutions for precision oncology, is transforming how clinical insights are generated and accelerating therapeutic innovations to patients.

Concerto HealthAI's enterprise AI solutions support innovative new approaches to RWE studies and a wide variety of research applications. Oncology providers gain insights into clinical variability, patient-reported outcomes, and integration of clinical research into clinical workflows to support patient-centered, precision oncology.

Symphony AyasdiAI topological data analysis

Advanced Healthcare Insights

Together, TeraRecon's next-generation imaging, Ayasdi unsupervised machine learning platform, and Concerto clinical outcomes insights deliver a complete ecosystem for innovative development, delivery, and optimization of AI-based medical imaging.

Image-derived quantitative and qualitative features combined with protocol metadata will greatly enrich patient EMR, claims, and non-clinical SDoH data. This data can be utilized for unsupervised and semi-supervised analysis to unearth new, breakthrough insights. Applications include the discovery of patient and treatment cohorts based on predicted trajectories for disease progression, cost, and utilization for targeted populations.

The Future of Healthcare

Other successful applications include the discovery of optimal treatment regimens progressed to standardized clinical pathways. This work eliminates unnecessary variation associated with poor outcomes. TeraRecon analysis generates image features, that combined with protocol metadata, enrich patient EMR data used in Ayasdi unsupervised/semi-supervised analysis.

SymphonyAI Government Solutions

Symphony AI Government Solutions use the proven, practical AI offerings of SymphonyAI Group to transform the public sector enterprise, delivering insights and predictive analytics that help reduce costs, control waste, and provide efficiencies.

For more than 50 years, SymphonyAI Group companies have delivered cutting edge expert analysis to mission-critical national security systems operating in the most demanding environments around the world. For more information, visit www.symphonyai.com/government-solutions or contact us at govinfo@symphonyai.com