

Medical Imaging Suite

A comprehensive platform from Google Cloud to accelerate the development and adoption of AI for medical imaging by making data accessible, interoperable, and useful.

<https://example.com/1762583716454>

Overview

The Google Cloud Medical Imaging Suite is an industry solution designed to address common pain points in developing and deploying Artificial Intelligence (AI) and Machine Learning (ML) models for medical imaging. The suite is built on the robust, secure, and compliant infrastructure of Google Cloud Platform (GCP), with the Cloud Healthcare API as its core component for data management.

Key Features and Components

The suite is comprised of five main components that cover the end-to-end AI workflow:

Imaging Storage: Utilizes the Cloud Healthcare API to allow easy and secure data exchange using the international DICOMweb standard for medical images (X-rays, MRIs, CTs, etc.). It provides a fully managed, highly scalable, enterprise-grade development environment.

Imaging Lab: Helps automate the highly manual and repetitive task of labeling medical images with AI-assisted annotation tools. It incorporates open-source frameworks like MONAI (Medical Open Network for AI) and tools from NVIDIA.

Imaging Datasets & Dashboards: Enables organizations to view and search petabytes of imaging data to perform advanced analytics and create training datasets with zero operational overhead using Google Cloud's BigQuery and Looker services.

Imaging AI Pipelines: Accelerates the development of scalable AI models using Vertex AI, which Google Cloud claims requires up to 80% fewer lines of code for custom modeling.

Imaging Deployment: Offers flexible options for deployment in the cloud, on-premises, or at the edge, allowing organizations to meet diverse data sovereignty, security, and privacy requirements via Google Distributed Cloud, enabled by Anthos.

Target Users and Use Cases

The Medical Imaging Suite is primarily targeted at **healthcare and life sciences enterprises**, including hospitals, research institutions, and medical device/technology companies. Primary use cases include:

Accelerating Diagnostics: Using AI algorithms to scan medical images for faster, more accurate diagnoses and to reduce the workload on radiologists.

AI Model Development: Providing a compliant and scalable platform for researchers and developers to build and train custom machine learning models (e.g., predicting cancer metastasis).

Interoperability: Standardizing diverse storage formats to the DICOM standard and enabling secure data exchange across different systems.

Clinical Research: Facilitating the creation of de-identified, petabyte-scale datasets for advanced analytics and research.

Key Features

- DICOMweb-compliant Imaging Storage (Cloud Healthcare API)
- Automated DICOM De-identification
- AI-assisted Annotation Tools (NVIDIA/MONAI integration)
- Petabyte-scale Imaging Datasets & Analytics (BigQuery/Looker)
- Accelerated AI Model Development (Vertex AI Pipelines)
- Flexible Deployment (Cloud, On-prem, Edge)

Pricing

Model: usage_based

Pricing is custom and enterprise-focused, based on the usage of underlying Google Cloud services (Cloud Healthcare API, Vertex AI, BigQuery, etc.). Costs are incurred for data storage, request volume, notification volume, and de-identification operations. Contact sales for a customized quote.

Target Company Size: enterprise

Integrations

Cloud Healthcare API, Vertex AI, BigQuery, Looker, NVIDIA, MONAI, NetApp, Change Healthcare, Google Distributed Cloud, Anthos

Compliance & Certifications

HIPAA, GDPR, SOC 1, SOC 2, SOC 3, HITRUST CSF, ISO 27001

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