

OpenNovations Aranei / SonadorAI

Combining flexible data management with AI powered image analysis.

Both solutions have **solid foundations in open-source software** and **open-standards**, which ensures that **organizations avoid vendor lock-in** and **safeguards sustainable future access to data**.

Data management platforms (DMPs) like OpenNovations Aranei are used to **collect, organize, and analyze large amounts of data from various sources**. Hospitals and clinics use them to **make better decisions by providing them with insight into their data**.

Medical imaging is an essential source of information to help doctors diagnose and treat disease, and represents a rich source data for AI to help health-care professionals **make more accurate diagnoses, improve confidence, and increase efficiency in the clinic**. Sonador is a medical imaging platform which can integrate with DMPs to **create AI and analytics solutions to solve clinical and scientific challenges**.

It does so through the use of **application programming interfaces, big data aggregation, and artificial intelligence methods to segment and classify large sets of data**. Here are some examples of DMP use cases:

- The integration of first-party and third-party databases/datasets.
- Organizing, correlating and combining data from multiple sources and formats.

Artificial Intelligence solutions for medical imaging, such as Sonador AI can **automate steps of the clinical process as well as provide support for decisions**. They can also be used to identify the most serious cases first. **Radiomics enables the transformation of standard medical imaging into mineable data assets that can be analyzed and combined with genomic data for improved decision support of precision medicine.**

ARTIFICIAL INTELLIGENCE FOR MEDICAL IMAGING HAS MANY USES, HERE ARE SOME EXAMPLES:

- Detecting breast cancer, which is the second most common type of cancer among women.
- Prescription of targeted treatments.
- Being able to predict whether a person will have a heart attack.
- Detecting early signs of dementia.
- Improving the outcome of surgery.

AI has strong applications in diagnosis and medical imaging because **machines are well suited for handling rare events such as uncommon diseases**. It excels in **advanced pattern recognition on a wider variety of anomalies than most**

human healthcare professionals are capable of.

In addition to its features as a medical imaging solution, Sonador provides a flexible storage and indexing system that can be used to **store nearly any type of raw, semi-structured, or structured data**. It can be used to enrich imaging, video, 3D files (such as STL, which is used for 3D printing), structured documents (such as JSON, XML, or DICOM Structured Report / SR), PDF, and other “encapsulated documents.”

By integrating with stream processing systems such as Kafka, Sonador in combination with Aranei can be used to **respond immediately to events for AI driven enrichment, data integration, allowing other applications to respond in real-time to changes, and fueling high-performance pipelines.**

Data Management Platform (DMP) is **software that collects, stores, and organizes data from a variety of sources**, such as an Electronic Medical/Health Record (EMR/EHR), pharmacies, patient feedback forms and medical imaging solutions. **Data is pushed through a series of processes**, such as a data clearinghouse and quality analysis.

Using a data management platform such as Aranei with a medical imaging toolchain like SonadorAI provides many benefits, including:

- Better quality and accuracy of the data.
- Better data management and ability to leverage datasets across organizations.
- Improved data sharing and collaboration.
- Better insights into the patient's demographic group that are highly vulnerable to diseases, thereby allowing them to take proactive actions for preventive measures.
- Better insights into the patient's overall health condition by combining data from multiple sources.

USE CASE:

Integrating SonadorAI and Aranei for improving remote Patient Care

► Functional application areas:

Healthcare providers, personal physicians, and caretaking homes

UNIQUE FEATURES AND VALUE:

► Patient data:

- SonadorAI's gateway device enables collection of data about patient vitals and physical activity
- Seamlessly uploads health data from various monitoring devices to Sonador.ai and Aranei servers
- Allows real-time access to patient health data, enabling prompt intervention when needed

► AI-powered Analysis and classification and predictive analytics:

- SonadorAI uses artificial intelligence to analyze EKG feeds for arrhythmias
- Automatically pushes notifications to care providers upon detection of anomalies
- Reduces response time and improves patient outcomes

► Population Health Management:

- Aranei's data management platform allows for comprehensive population health management
- Enables providers to analyze patient data and identify trends in both patient and population health
- Facilitates proactive decision-making and resource allocation for healthcare services

► Enhanced Collaboration:

- Integration of SonadorAI and Aranei promotes efficient information sharing among healthcare professionals
- Streamlines communication and enables data-driven decision-making



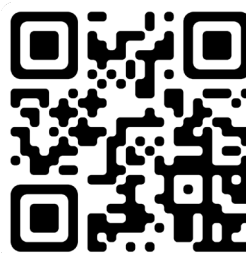
For more
information
on Sonador
visit

<https://sonador.ai>



For more
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