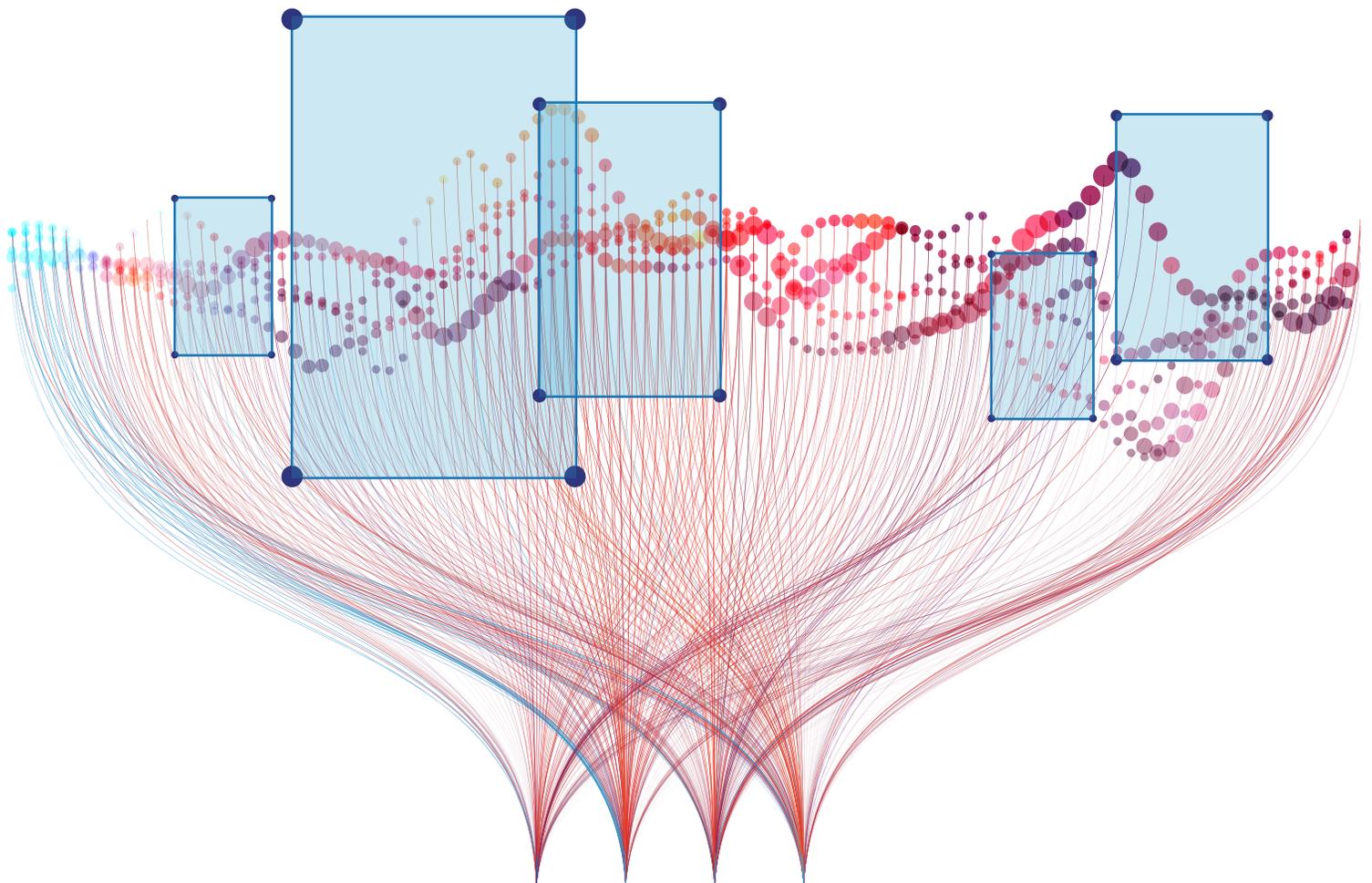




Create AI Training Data with HelloData

Medical data processing specialized solution with high accuracy and diverse features

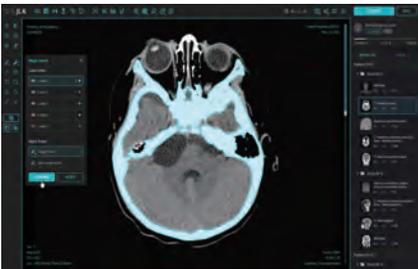


Special Features of Hellodata **MEDI**



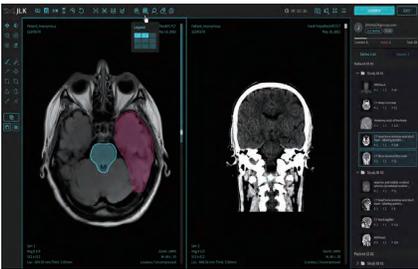
01 DICOM Direct Import

Fast and easy medical data processing without extra file conversion by supporting DICOM file which is a data file used as standard format in medical institutions



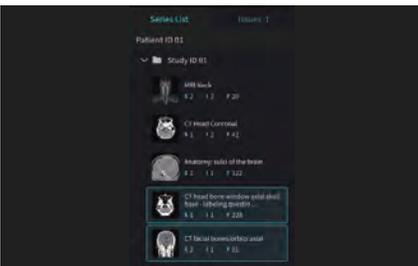
02 AI Annotation

For highly accurate data processing tasks, swift and accurate AI annotation feature which is JLK's medical AI algorithm-based is offered



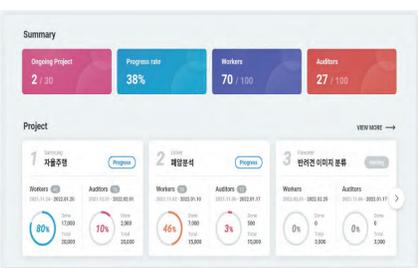
03 Data Processing Tools and Viewer

High-quality data and worker-centered processing environments are offered with medical image optimal data processing tools



04 Automatic Data Anonymization /Structurization

Providing data anonymization to protect sensitive information of each individual and structurization to sort data into groups

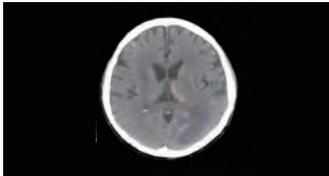


05 Systematic Project Management

- The project manager can monitor worker/auditor status and project progress in real-time
- Statistics on project progress provide worker throughput and schedules to project deadline

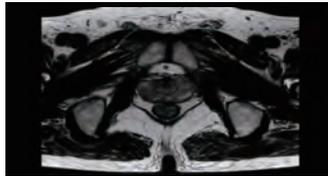
DICOM Direct Import

Easy *DICOM file upload to support processing of various (8) types of medical image modalities such as CT/MRI/MRA, etc



CT

Uses CT scans to create cross-sectional images of the body. Used to diagnose tumors or cancer



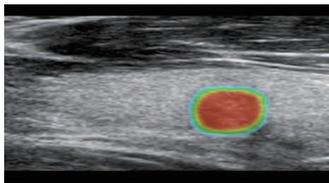
MRI/MRA

Uses magnetic fields to create detailed (3D) images of organs and tissues in the body. It has wide range of uses, such as brain nerves, and vascular diseases



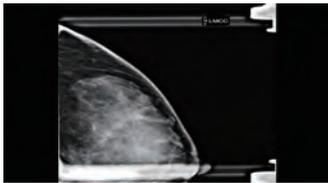
X-ray

Radiation penetrates body and differences in shading is used to identify fractures, or deformation of an organs (bones, lungs, etc.)



Ultrasound

Sends high-frequency soundwaves from body surface to the inside to identify arteries, vessels of arms, legs and stomach



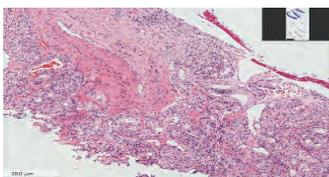
Mammography

Identifies mammary tissue, concentration, and calcification, an important indicator of breast cancer



Endoscopy

Observes intestinal organs, especially films and records mucous membrane of stomach/intestines



Pathology

Observes cells, tissues, etc. for diagnosis



Fundus Image

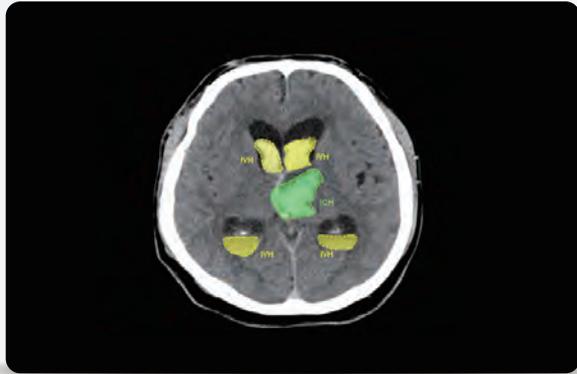
Images of retina, optic nerve, etc. to check eye diseases such as bleeding

*DICOM

A medical file format that comprehensively contains medical images from medical devices, image-related data (modality types, device information, etc.) and patient clinical information

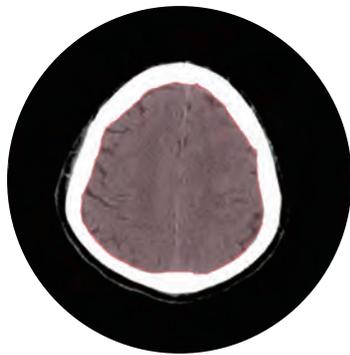
AI Annotation

Groundbreaking savings in costs & time with JLK's own AI-Drawing feature and Cloud-based work environment for multiple workers



For highly accurate data processing tasks, the AI-drawing tool assists swift annotation tasks for complex medical data

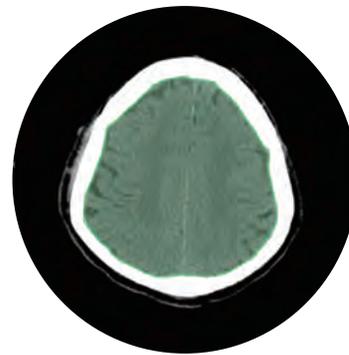
Manual Labeling



Operation Time **60 sec.**



JLK AI-Drawing



Operation Time **2 sec.**



AI-Drawing usage
reduces unnecessary waiting time

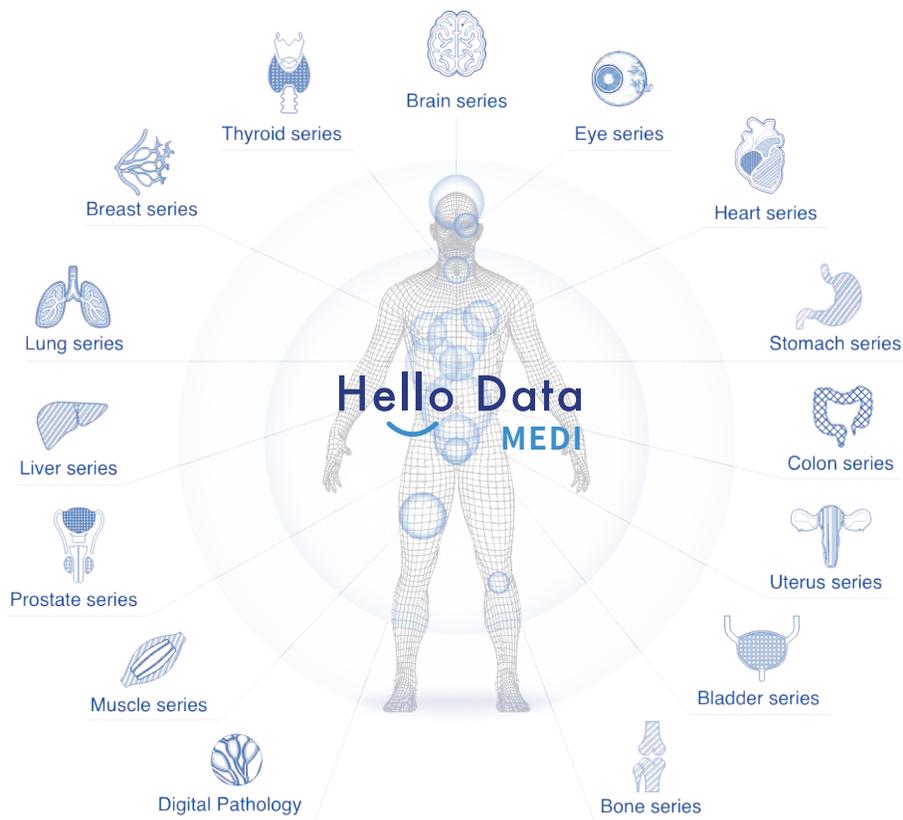
Work Efficiency ↑
Work Speed ↑

AI Annotation

Solutions for High Accuracy

37+
Solutions

3Hellodata MEDI, applied with 37 AI medical solutions and technology knowhow, offers solutions that can quickly recognize and process data required for medical AI solutions development

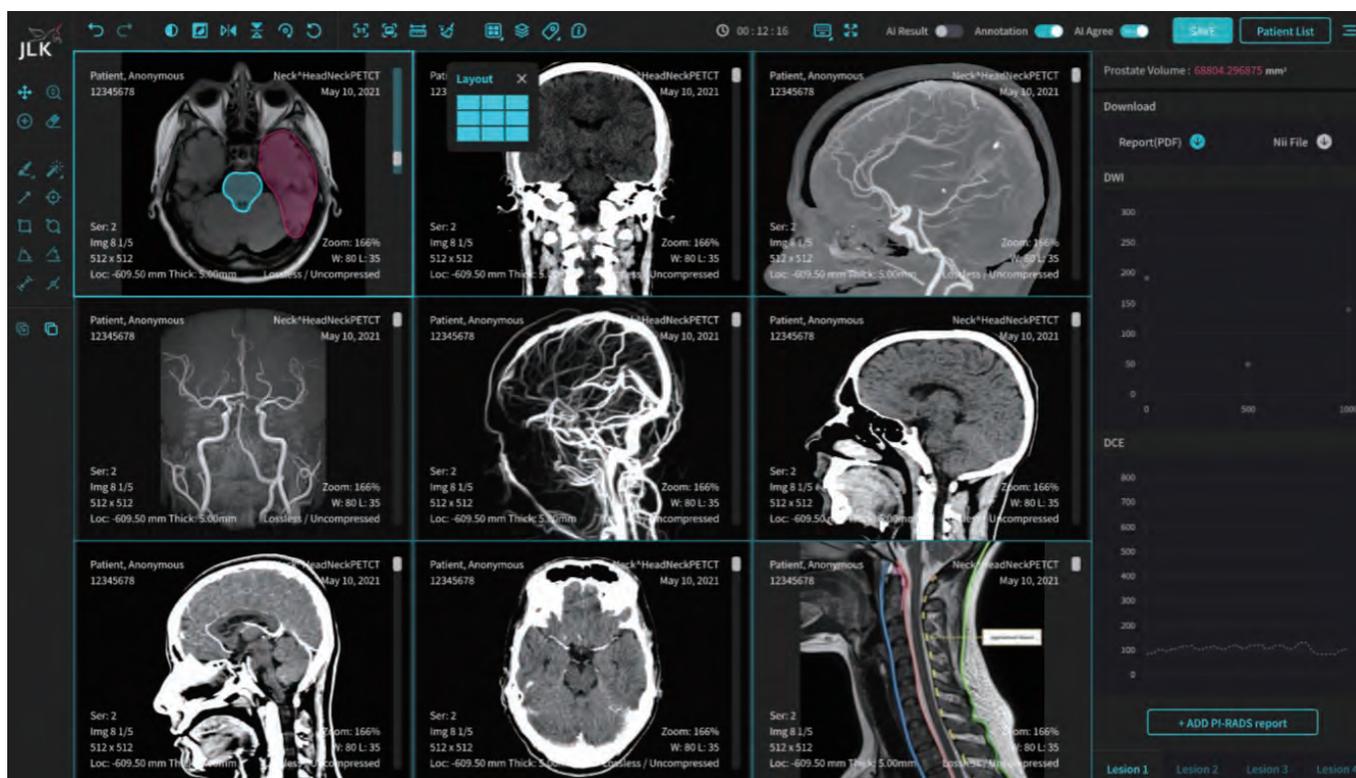


110+
Augmentation

Hellodata MEDI, applied with 37 AI medical solutions and technology knowhow, offers solutions that can quickly recognize and process data required for medical AI solutions development

**“ Lead your AI medical project to success
with JLK's own AI medical data, algorithm, and solutions ”**

Data Processing Tools and Viewer



Tools optimized for Medical Data

Providing annotation tools essential for medical data processing & visualization

User-centered UI/UX

Offering UI/UX considering workers' convenience and efficiency as top priority

Medical Image Viewer Function

Hellodata MEDI's exclusive medical image viewer offers convenient task environment

Advantages of Processing

- With Hellodata MEDI, a multi-type data processing platform, medical images, as well as patient information and other image-related data can be processed on a single platform
- No need for extra file conversion process
- Using header information from DICOM file to standardize annotations on the image and other data
- Various patient information can be processed

Automatic Data Anonymization / Structurization

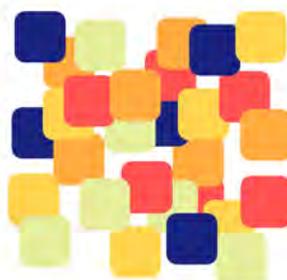
▪ Automatic Data Anonymization

Medical data anonymizes patient information so data usage is maximized and privacy is guaranteed when the data is processed, analyzed and utilized



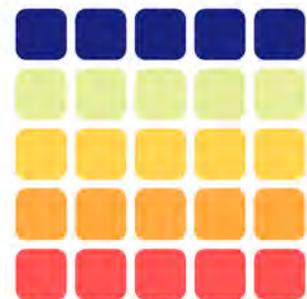
▪ Automatic Data Structurization

Shorten uploading time by grouping similar images automatically from numerous data such as X-ray, CT, etc



Unstructured

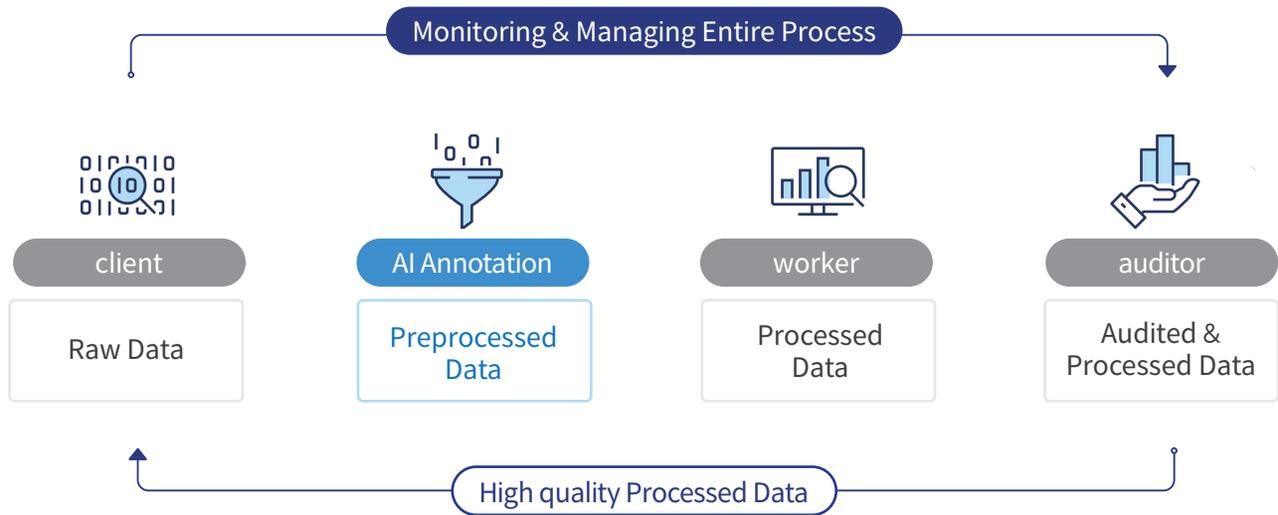
vs



Structured Data

Systematic Project Management

Real-time project status provides efficient project environment



- Dashboard and Status statistics provided for project manager to manage project progress and worker/auditor status in real-time
- Worker invitation and statistics on project progress offers worker's throughput and schedules to the deadline
- Flexible re-allocation and modification of authorization of worker/auditor according to their information
- Issue/comment function provides real-time communication with worker/auditor on the task page

Applications in Medical /Healthcare

Fast & Convenient tools for analysis/processing for medical data that requires accuracy can assist in establishing an AI-based diagnosis model and is used in various parts of the medicine/healthcare industry



Medical Image Analysis

- Supporting various types of medical images and fast & accurate AI-based annotation technology application
- Applied similar UI/UX environment to medical image viewer used in hospitals

Health Data based Disease Prediction

- Digitize and Analyze various medical data such as lifelog collected through wearable devices
- Predict disease incident possibility or suggest personalized lifestyle

Disease Affected Area Analysis

- Classifying and analyzing diseases using photos of skin diseases and wounds, etc.
- Providing visualization processing tools for disease analysis

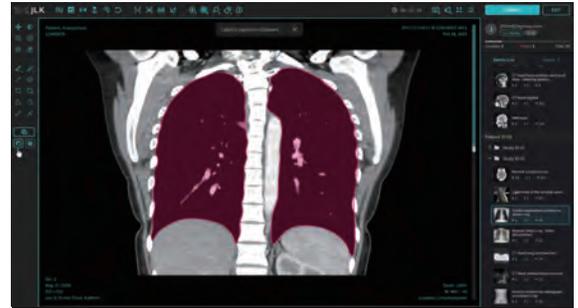
Diagnostic Kit Results Analysis

- Data collection and processing services for automatic detection of diagnostic kit response lines
- Collecting data and developing algorithms to prevent misdiagnosis due to foreign substances

Use Cases in Medical/Healthcare

Company 'B'

- Supported AI training dataset establishment with multiple university hospitals and Company 'B', an AI software company
- Processed data for body part cancer AI modeling and application software development
- Provided annotation and labeling tools for lung and thyroid cancer areas on medical image data



Company 'T'

- Company 'T' requested for detection system using images of foot skin diseases
- Trained with 11,000 AI training data of various foot images and data containing types and location of the diseases. Then acquired more than 96% of accuracy



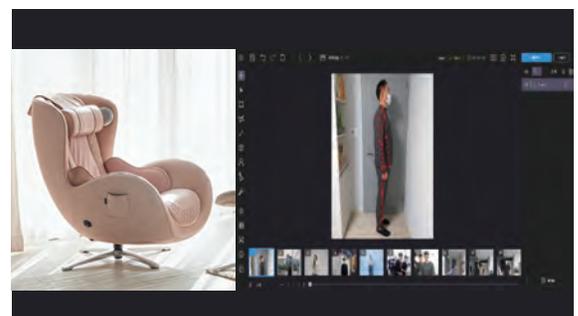
Company 'H'

- Company 'H' aimed to arrange AI algorithms for the mobile testing kit analysis results alarm services
- Collected more than 1000 images of reacted testing kits showing positive/negative results, analyzed the response areas, then trained AI with automatic recognition and preprocessing modules



Company 'N'

- Company 'N' planned to customize massage program through AI-based body shape analysis
- Developed an AI model combining posture prediction AI model and human detection AI, then provided their planned service in API format





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