AI for Human Benefit, Everywhere
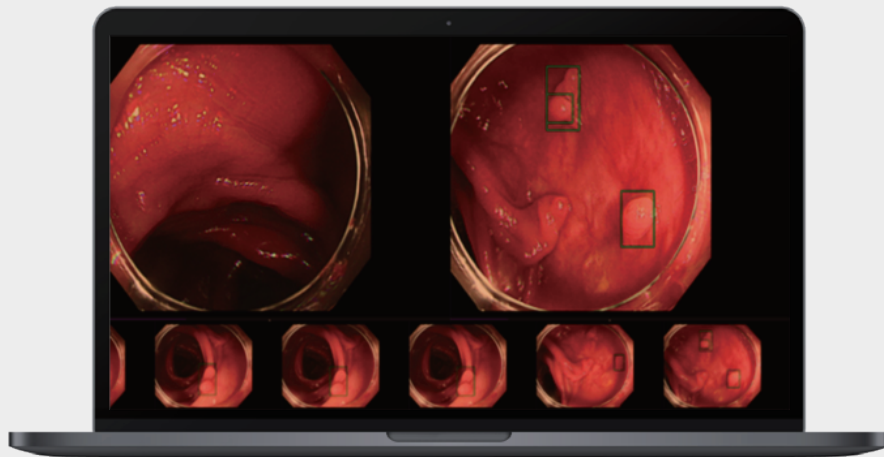
JFD Series

AI based Endoscopy Analysis Solution

MEDIHUB ENDOSCOPY

JLK

JFD-01K   AI based Colon Polyp Detection Solution

Summary

Colorectal cancer can be easily prevented through early detection and resection of polyps. However, a specialist must check the colonoscopy image from beginning to end. Also, the proficiency of the specialist has a great influence because it is not a standardized image. Therefore, assistance of AI is needed to perform consistent checkups without being affected by the specialist's proficiency or fatigue.

JFD-01K is an AI-based medical solution that detects diseases and abnormalities in colonoscopy images obtained from endoscopic devices. This solution can detect diseases in real time from colonoscopy images and assists diagnosis by indicating the location and probability of the detected area.
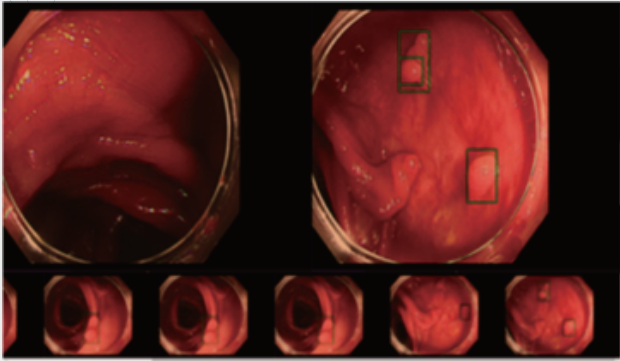
Key Components & Performance

· Single data center AP(Average Precision) 96.70%
· Analysis Time : within 0.03s
· Convenient video input/output through PACS
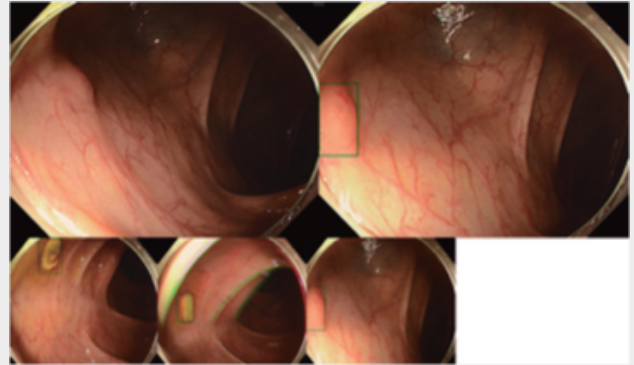· Display analysis result within user interface

Input / Output

· **Input Data**   Patient colonoscopy video stream
· **Output Information**   Location of polyp and its probability
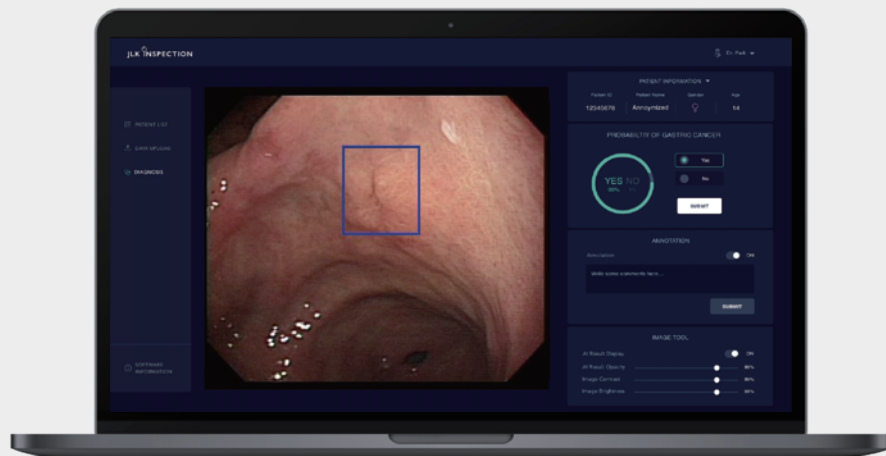
Solution UI

1 Visualization of polyp in colonoscopy (1)

2 Visualization of polyp in colonoscopy (1)

Unique Functionality

· Real-time detection of polyp in colonoscopy with AI

· Install with ease via capture board

· Provide result auto-save function for future analysis

JFD-02K
AI based Gastric Cancer Detection Solution

Summary

The survival rate after 5 years of early gastric cancer surgery is high, but recently it has been reported that the number of small sized or atypical type of gastric cancer is increased and it is far more difficult to detect it through an endoscopic examination.

JFD-02K supports diagnosis of doctors by cancer in gastric endoscopy.

Key Components & Performance

· Gastric endoscopy image visualization
· Gastric cancer region detection result image visualization
· Various image processing tool (zoom in and out, change of brightness and contrast)

Input / Output

· Input Data   Patient's Gastric endoscopy
· Output Information   Gastric cancer area, Gastric cancer Probability
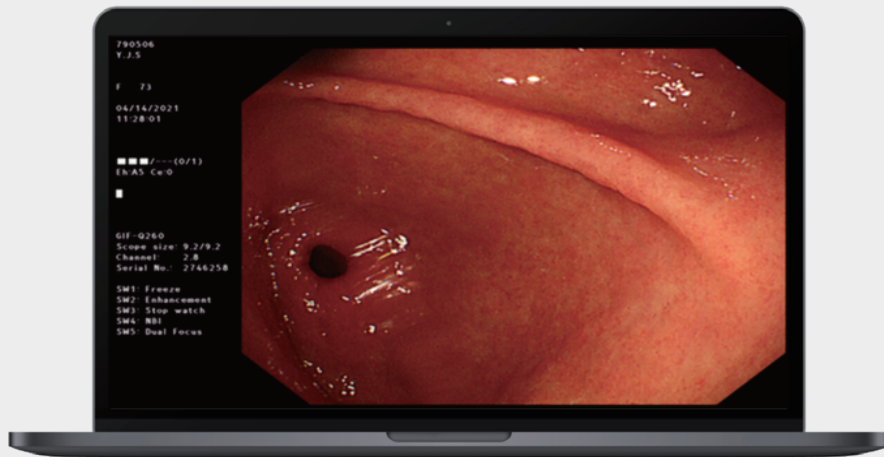
JFD-03K

AI based EGD Blind-Spot Detection Solution

Summary

Esophagogastroduodenoscopy (EGD) is an essential process for diagnosing gastrointestinal diseases. However, the quality of endoscopy varies depending on the examiner, so early detection of diseases such as gastric cancer may not be performed properly.

JFD-03K is an artificial intelligence-based medical solution that assists the examiner to examine all 26 areas in the esophagus, gastrointestinal, and duodenum.
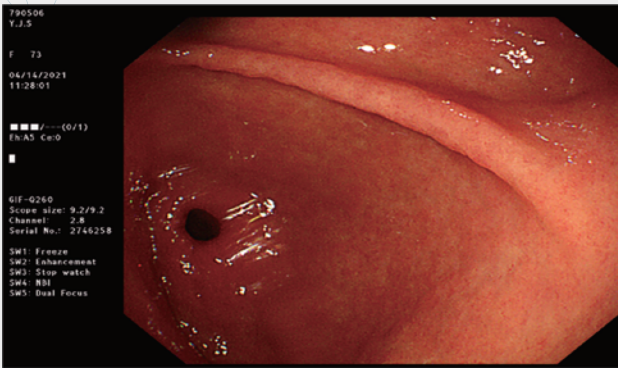
Key Components & Performance

· Single Data Center Accuracy 80%
· Convenient patient data management through PACS interworking
· Display analysis result within the web-based user interface

Input / Output

· Input Data   Patient's Gastrointestinal Endoscopy
· Output Information   Gastrointestinal Endoscopy 26 Sites information

Solution UI

1 Gastrointestinal Endoscopy Input Data

2 Gastrointestinal Endoscopy spot information

Unique Functionality

· Gastrointestinal area classification

· Provides detected blind-spot information

· Automatically save the representative of each area image

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