VCE TOOL

PILOT 1
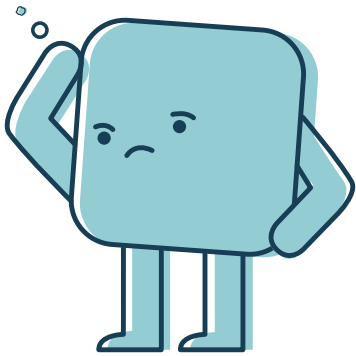
Misdiagnosis or delayed diagnosis are two of the most common types of medical malpractice. They often result in patients not receiving proper and timely care, potentially followed by a serious deterioration of their health or even death.

PROBLEMS

Capsule endoscopy is the only and very expensive technique to identify and examine the small bowels. In clinical practice the use of video capsule endoscopy is a very time-consuming and tedious task. The user, typically a gastroenterologist and/or an assistant, first needs to watch a very long video (about 1 hour duration) before the real scientific work of the physician can begin.
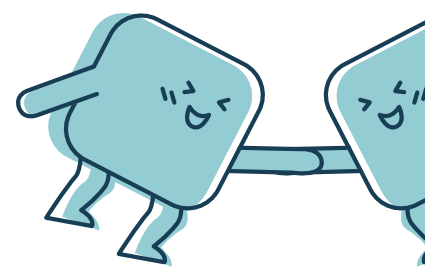
OBJECTIVES

Improve the assessment of the small bowel via video capsule endoscopy.

THE SOLUTION

An Artificial intelligence application that assists gastroenterologists by automatically detecting and classifying abnormalities while significantly reducing the time of a CE video examination. The screening of the video is performed by an AI algorithm which filters the most important and significant frames and delivers them to the physician who can then start his clinical work.

The solution is not a black box. The input of each solution is a comprehensive list of clinical variables and demographic information. The focus is on providing explainability through features fhat will allow to understand why the algorithm produces specific outcomes.

Additionally, while the current commercial products are desktop applications, the solution will also include a mobile application to guarantee high video streaming quality.

VALUE PROPOSITION

The application is being developed by analyzing several AI models, which will lead to optimization (i.e., it is not a time-consuming solution).

MARKET

Healthcare: Private gastroenterologists; Public and private healthcare facilities (Hospitals; Gastroenterology clinics)

Industry: Capsules' producers

BENEFICIARIES

Gastroenterologists, Reader extenders of capsule endoscopy

SOLUTION PROVIDERS

Main solution provider:

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