

Journal: Artificial Intelligence in Gastrointestinal Endoscopy

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Article type: Review

Title: “Emerging artificial Intelligence applications in Gastroenterology: a review of the literature”

Authors: Morreale GC¹, Sinagra E², Vitello A¹, Shahini E³, Maida M¹

Abstract

Artificial intelligence (AI) allows machines to provide disruptive value in several industries and applications. Applications of AI techniques, specifically machine learning and more recently deep learning, are arising in gastroenterology. Computer-aided

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1	Crossref 110 words Gregor Urban, Priyam Tripathi, Talal Alkayali, Mohit Mittal, Farid Jalali, William Karnes, Pierre Baldi. "Deep Learnin	2%
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The emerging role of AI in medicine, gastroenterology and ...

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Mayo Clinic views AI as a set of **techniques** and technologies that serve to augment, rather than replace, human **intelligence**. AI excels in discerning patterns in complex data sets that may not be easily detected using human analysis. Patterns that are nuanced and highly multifactorial and those buried in an extremely large data set are often difficult for any individual human to navigate or detect.

American Gastroenterological Association Clinical Practice ...

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Aug 31, 2019 · The purpose of this American Gastroenterological Association (AGA) Institute Clinical Practice Update is to **review** the available evidence and expert recommendations regarding the clinical care of patients with pancreatic necrosis and to offer concise best practice advice for the optimal management of patients with this highly morbid condition.

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Author: Todd H. Baron, Christopher J. DiMaio, An...

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Artificial intelligence (AI) using deep-learning (DL) has emerged as a breakthrough computer technology. By the era of big data, the accumulation of an enormous number of digital images and medical records drove the need for the utilization of AI to efficiently deal with these data, which have become fundamental resources for a machine to learn by itself.

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Author: Young Joo Yang, Chang Seok Bang

Publish Year: 2019

Gastroenterology Meets Machine Learning: Status Quo and ...

<https://www.hindawi.com/journals/abi/2019/1870975> ▼

In this work, we present the results gleaned through a systematic review of prominent gastroenterology literature using machine learning techniques. Based on the analysis of 88 journal articles, we delimit the scope of application, we discuss current limitations including bias, lack of transparency, accountability, and data availability, and we ...

Cited by: 1

Author: Amina Adadi, Safae Adadi, Mohammed B...

Publish Year: 2019

New technologies in breast cancer sentinel node biopsy ...

<https://www.sciencedirect.com/science/article/abs/pii/S0960740420303327>

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[Application of artificial intelligence in gastrointestinal ...](https://onlinelibrary.wiley.com/doi/abs/10.1111/1751-2980.12827)

<https://onlinelibrary.wiley.com/doi/abs/10.1111/1751-2980.12827>

Oct 22, 2019 · The **present review** summarizes current publications on the use of **AI in GI endoscopy** and focuses on the challenges and future of AI-aided systems. We expect AI to provide an effective and practical method for endoscopists in lesion detection and characterization as well as in quality control in **endoscopy**.

Author: Yi Shan He, Jing Ran Su, Zhen Li, Xiu... **Publish Year:** 2019

[Frontiers | Artificial Intelligence Applications in ...](https://www.frontiersin.org/articles/10.3389/fmed.2020.00100)

<https://www.frontiersin.org/articles/10.3389/fmed.2020.00100>

Mar 31, 2020 · **Artificial intelligence** (AI) has become a progressively prevalent Research Topic in medicine and is increasingly being applied to dermatology. There is a need to understand this technology's progress to help guide and shape the future for medical care providers and recipients. We reviewed the **literature** to evaluate the types of publications on the subject, the specific ...

Cited by: 2

Author: Arie Gomolin, Elena Netchiporouk, Rob...

Publish Year: 2020

[8.7c Emerging technologies: artificial intelligence ...](https://pressbooks.bccampus.ca/.../chapter/8-7-c-artificial-intelligence)

<https://pressbooks.bccampus.ca/.../chapter/8-7-c-artificial-intelligence>

Oct 10, 2019 · 8.7c **Emerging technologies: artificial intelligence** Figure 8.7c.1 Image: Applift. 8.7c.1 Focusing on AI's affordances for teaching and learning. **Artificial intelligence** (AI) is a daunting topic as there are so many issues with respect to its use in education.