

Name of Journal: *Artificial Intelligence in Cancer*

Manuscript NO: 58075

Manuscript Type: EVIDENCE REVIEW

Applications of artificial intelligence in, early detection of cancer, clinical diagnosis and personalized medicine

Ullah M et al. AI in cancer

Mujib Ullah, Asma Akbar, Gustavo Yannarelli

Abstract

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to convert raw input data into decision making actions, like

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Artificial Intelligence Applications in Medical Imaging as Applied to Common Cancers. **Artificial intelligence** tools can be conceptualized to apply to 3 broad categories of image-based **clinical** tasks in oncology: 1) **detection** of abnormalities; 2) characterization of a suspected lesion by defining its shape or volume, histopathologic **diagnosis**, stage of disease, or molecular profile; and 3 ...

Cited by: 136

Author: Wenya Linda Bi, Ahmed Hosny, Matthew...

Publish Year: 2019

Artificial Intelligence Applications in Healthcare

<https://pixelplex.io/blog/artificial-intelligence-applications-in-healthcare> ▾

Artificial intelligence uses CT scans, electrocardiograms (ECG), cardiac MRI images, skin images, retinal scans, and X-Ray scans to detect cancer, stroke, diabetes, and other diseases. AI algorithms make use of large volumes of high-quality healthcare data to classify or predict diseases with comparable or even better accuracy than human experts.

Artificial intelligence in cancer diagnosis and prognosis ...

<https://www.sciencedirect.com/science/article/pii/S0304383519306135>

Feb 28, 2020 · Furthermore, as **artificial intelligence** (AI), especially machine learning and deep learning, has found popular **applications** in **clinical cancer** research in recent years, **cancer** prediction performance has reached new heights. This article reviews the literature on the **application** of AI to **cancer diagnosis** and prognosis, and summarizes its advantages.

Cited by: 2

Author: Shigao Huang, Jie Yang, Simon Fong, Si...

Publish Year: 2020

[PDF] Artificial intelligence in cancer imaging: Clinical ...

<https://acsjournals.onlinelibrary.wiley.com/doi/epdf/10.3322/caac.21552>

In particular, artificial intelligence (AI) promises to make great strides in the qualitative interpretation of cancer imaging by expert clinicians, including volumetric delineation of tumors over time, extrapolation of the tumor genotype and biological course from its radiographic phenotype, prediction

Artificial Intelligence – Improving How We Diagnose Cancer ...



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Sep 30, 2019 · A study released this week by The Lancet Digital Health has examined all the data between 2012 and 2019 of the testing that has been involved in **artificial intelligence** ...

[Artificial Intelligence in diagnostic medicine – a tool to ...](#)

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Here, Gerry Morrow discusses whether we will ever see AI fully replicate autonomous decision making and what the future role of AI in diagnostic **medicine** is

[Artificial Intelligence – Improving How We Diagnose Cancer ...](#)

<https://www.technologynetworks.com/informatics/articles/artificial-intelligence...> ▾



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As early as 1988, *The Annals of Internal Medicine* mentioned that conventional computer-aided diagnoses were limited, and to overcome the shortfalls, researchers turned to artificial intelligence. However, because of the limited technology available at the time, the system had to be manually trained by

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Frontiers | Artificial Intelligence in Medicine: Today and ...

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Introduction Current Applications of Artifi... Conclusion Author Cc >

The expression "Medical Technology" is widely used to address a range of tools that can enable health professionals to provide patients and society with a better quality of life by performing early diagnosis, reducing complications, optimizing treatment and/or providing less invasive options, and reducing the length of hospitalization. While, before the mobile era, medical technologies were mainly known as

Artificial Intelligence



Artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, unlike the natural intelligence displayed by humans and animals. Leading AI textbooks define the field as the study of "intelligent agents": any devi... +

Wikipedia

Subdisciplines: Machine Learning - Cognitive artificial intelligence

Subdiscipline of: Computer Science

Academic conferences: AAI 2016 · IJCAI 2016 · European Conference on Artificial Intelligence (ECAI) 2016 · AI 2016 · AAMAS 2016 +

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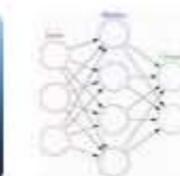
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Deep Learning



Robotics



Artificial Neural



Big Data