

# The Role and Application of Artificial Intelligence (AI) in Leveraging Big Data in The Healthcare Domain

Hamed. Jabbari 10, Nooshin. Bigdeli 1\*0

Department of Control Engineering, Faculty of Engineering, Imam Khomeini International University, Qazvin, Iran

\* Corresponding author email address: n.bigdeli@eng.ikiu.ac.ir

Editor	Reviewers
Khadijeh Irandoust <sup>®</sup>	Reviewer 1: Masoud Mirmoezi
Associate Professor, Department of	Department of Physical Education and Sport Sciences, Islamic Azad University,
Sport Sciences, Imam Khomeini	Central Tehran Branch, Tehran, Iran. Email: massoudmirmoezi@live.com
International University, Qazvin,	Reviewer 2: Masoud Mirmoezi
Iran	Department of Physical Education and Sport Sciences, Islamic Azad University,
irandoust@ikiu.ac.ir	Central Tehran Branch, Tehran, Iran. Email: massoudmirmoezi@live.com
nandoust@ikiu.ac.li	Central Tentan Branch, Tentan, Iran. Eman. massoudinimioezi@nve.com

#### 1. Round 1

### 1.1 Reviewer 1

Date: 06 March 2023

Reviewer: This letter effectively highlights the significant potential of AI in revolutionizing healthcare through big data. Enhancing the narrative with more detailed examples, a deeper dive into challenges, and a look into the future could provide a more compelling and comprehensive read.

The introduction sets a compelling context for the discussion, linking the rise of chronic diseases and the need for advanced healthcare solutions. Enhancing it with a brief historical perspective of AI in healthcare could provide a more rounded introduction.

The discussion comprehensively outlines the current state of AI in healthcare. To deepen the discussion, consider comparing AI's impact across different healthcare sectors or regions.

The letter touches on the potential challenges and opportunities of AI in healthcare. Expanding this section to include more on overcoming barriers could enrich the dialogue.

While the letter mentions innovative AI applications, a more focused section on recent breakthroughs or predictions for future advancements would captivate the reader's interest.



The conclusion aptly summarizes the key points and reiterates the importance of AI in healthcare. A more forceful closing could include a call to action for continued research, collaboration, or policy development.

Authors revised the manuscript and submitted the document.

## 1.2 Reviewer 2

Date: 13 March 2023

Reviewer: The letter adequately outlines various AI applications in healthcare. It might enhance its contribution by discussing emerging innovations or predicting future trends in AI and healthcare.

Recommendations for Revision:

Historical Context: Offer a brief history of AI's evolution in healthcare to set the stage for current discussions.

More on Challenges: Delve deeper into the challenges, including data privacy, interoperability, and the need for standardization in AI applications.

Predictive Outlook: Provide predictions or trends for AI in healthcare, giving readers a glimpse into what the future might hold.

Include Case Studies: Incorporate specific case studies or success stories to illustrate the real-world impact of AI in healthcare.

Address Ethical Considerations: Discuss the ethical implications of AI and big data usage, including privacy concerns and decision-making autonomy.

Future Directions: Provide insight into emerging technologies or methodologies that could further revolutionize healthcare through AI and big data.

Authors revised the manuscript and submitted the document.

#### 2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.

