

IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS

J-BHI Special Issue on “Achieving Health Equity Through AI for Diagnosis and Treatment”

Artificial intelligence (AI) plays an increasingly important role in population and public health practice, administration, and surveillance in the health sector. However, much as AI uses data-driven analytics to mimic human cognition, it will also reflect the prejudices that exist in our consciousness. Indeed, it has been discovered that several algorithms used to guide population medicine programmes, government healthcare reimbursements, and clinical management discriminate against protected social groups.

Decision processes, organization, computerization, and administration in the health sector are all aided by AI in medical diagnosis. This could be utilized for cancer detection, critical imaging processing, identifying abnormalities, helps in assisting radiologists in prioritizing critical patients, diagnosing a cardiac arrhythmia, predicting stroke outcome, also aids in chronic disease management.

AI tools are assumed to be that they will instead work by entirely replacing the task of physicians and other healthcare professionals and will also help in improving human work. AI has the potential to help healthcare staff with a variety of functions, including organization duties, clinical record handling, and patient outreach, and specialized help in areas including image processing, computational device, and remote monitoring.

Artificial intelligence is undergoing a population and public health revolution that can drastically transform current care delivery and practice patterns. AI can portray the prejudices present in our consciousness, just as it aims to replicate human beings' perceptions through analytics based on data.

AI helps produce digital apps through which the patient's health record is maintained. It gives primary requirement data digitally whenever needed by the patient. Thus, AI plays a vital role in achieving health equity by its application in diagnosing and treating patient diseases. To ensure that AI technologies are ethically integrated into the health system, It is necessary to agree on how to regulate algorithmic bias at the policy level. We invite researchers and practitioners to do more projects on AI applications in the Health sector.

Manuscripts, including research articles and critical reviews, are welcomed in the special issue's theme.

Topics of interest for this special issue include, but are limited to

- Health care: Artificial intelligence applications
- Good health and Artificial intelligence
- AI tools advantages in health care system
- Hope and hype of Artificial intelligence in the Health care system.
- Revolution risks and benefits of Artificial intelligence in health care system
- AI in maintaining health equity
- Transformation in health care by using AI
- Future of global health: Artificial intelligence
- Artificial intelligence implementation in health care statistics
- Machine learning in health care
- AI and IoT in health care
- Biomedical research in health care using Artificial intelligence.

Guest Editors

Muhammad Ibrahim, Department of Information Technology, University of Haripur, Pakistan, varunmenon@ieee.org
Habib Hamam, Université de Moncton, Moncton, New Brunswick, Canada 451 connections, habib.hamam@umoncton.ca

Md. Redowan Mahmud, Curtin University, Australia, mdredowan.mahmud@curtin.edu.au

Key Dates

Deadline for Submission: 15 September, 2022

First Reviews Due: 15 November, 2022

Revised Manuscript Due: 15 December, 2022

Final Decision: 15 February, 2023

