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Integration of Artificial Intelligence and 5G Technology for Transformative Healthcare

Abstract

Worldwide Healthcare System faces significant challenges in achieving the triple aim for improving population health, enhancing patient experience and reducing cost in healthcare. The integration of Artificial Intelligence, Machine Learning and 5G technologies scripts a paradigm shift and offers a transformational approach to patient care in Healthcare Industry. The collaboration among these technologies makes the system efficient in telemedicine, remote patient monitoring and understanding of precision medicine towards patient care. ML algorithms access more data, feasible hardware and 5G resources that contribute for the development of AI transformation in medicine. AI provides solution through big data, machine learning and deep learning algorithms that refine massive quantity of health data records, clinical studies to genetic information, analyze faster than humans, decision making, detect and track infectious diseases. AI in healthcare organizations support for better health monitoring and preventive care to compose healthcare operation more efficient with 24/7 patient services. This chapter outlines the recent breakthroughs, roadmap to build reliable, effective and safe AI systems and converse the possible future direction by integrating AI with 5G augmented patient care in healthcare applications.

Author: M, imayavarman

Co-author: Mr S, Hariganesh (Jain university)

Presenters: Mr S, Hariganesh (Jain university); M, imayavarman

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