

The Role of Artificial Intelligence in Diagnostic Radiology

Chris Walker

PhD

Sapienza University of Rome
Rome, RM 00185, Italy

Skyler Taylor

Dr.

University of Paris
Paris, Île-de-France 75006, France

Pat Gonzalez

Prof.

Karolinska Institute
Stockholm, SE-171 77, Sweden

Abstract. This article investigates the transformative role of artificial intelligence (AI) in diagnostic radiology. AI algorithms can enhance image analysis, leading to more accurate and quicker diagnoses. The study discusses the integration of AI in radiology, its benefits, limitations, and potential future developments in clinical practice.

Keywords: Artificial Intelligence, Diagnostic Radiology, Image Analysis, Clinical Practice, AI Algorithms

Introduction

Artificial intelligence (AI) is revolutionizing various fields, including diagnostic radiology. AI algorithms are designed to enhance image analysis, thereby facilitating more accurate and rapid diagnoses. This article explores the integration of AI technologies in radiological practices, highlighting their benefits in improving diagnostic accuracy and efficiency. It also examines the limitations associated with AI, such as the need for substantial data and the challenges in algorithm development. The potential for AI to transform clinical radiology practices is significant, yet it is accompanied by ethical and regulatory considerations.

This is a preliminary version. To read the full version of the article, please purchase a subscription.

References

1. Sultanova, M. M., & Hasanova, R. M. (2024). ASSESSMENT OF VISUAL FUNCTIONS OF CHILDREN BORN IN CONSANGUINEOUS MARRIAGE ON THE BASIS OF APPEAL TO THE DISABILITY COMMISSION. ВЕСТНИК ПРОБЛЕМ БИОЛОГИИ И МЕДИЦИНЫ, 1(4), 611.