

Machine Learning in Medical Diagnosis

Applications of Machine Learning and AI in healthcare are becoming increasingly important.

Deep learning models can assist doctors in diagnosing diseases from X-rays, MRI images, and clinical data analysis with improving accuracy.

Key applications: Medical imaging (CNN for X-ray, CT scan analysis), disease prediction (cardiovascular risk, diabetes), and NLP for electronic health records.

Challenges include data privacy - Federated Learning allows training without sharing raw data. Explainable AI helps doctors understand model reasoning for clinical trust.