AI IN HEALTH

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AI has had a significant impact on medical diagnosis, among various subfields in the medical field. For example, precise medical image analysis using AI-based algorithms was being used in radiology. This AI-based algorithm has been shown to detect breast cancer more accurately than radiologists, especially in mammography. AI has also shown higher accuracy than traditional methods in burn and wound management. The AI-powered tool uses advanced machine learning algorithms to analyze wound images to provide a quick and accurate assessment. These tools can help identify infections, determine burn depth, and monitor healing progress more accurately. Moreover, the model predicts a patient's healing process through patient data, including demographics, wound characteristics, and comorbidities. These predictions not only enable rapid and accurate diagnosis, but also help doctors customize treatment plans, optimize resource allocation, and improve patient outcomes. AI can also be used to detect diabetic foot ulcers. Machine learning models trained on large datasets of foot images can accurately classify the severity of ulcers and recommend appropriate debridement surgical approaches. This improves the patient's chances of cure by reducing the risk of complications such as infection and amputation. Previously, there was no technology available to provide doctors with an objective and immediate assessment of a diabetic foot ulcer's healing potential. Diagnostic imaging products that leverage AI technology allow doctors to use objective AI techniques as well as subjective assessments based on their own experience to determine whether wounds, such as diabetic foot ulcers, are responding to treatment.

AI is having a significant impact on the development of the medical industry by contributing to customized medicine. AI can analyze medical information more efficiently and accurately through natural language processing (NLP). This AI technology processes and interprets massive amounts of unstructured text data from each patient's electronic health record (EHR), clinical notes, and research papers to extract valuable insights that support clinical decision-making and enable customized medicine. As more data becomes available, AI algorithms will become increasingly accurate and will develop the ability to plan personalized treatments that optimize patient outcomes. In particular, the integration of AI with wearable devices and remote patient monitoring will facilitate real-time data collection, allowing healthcare providers to continuously monitor individual patients outside of traditional clinical settings. This will enable doctors to leverage AI to provide more targeted treatment, reduce diagnostic errors, and improve patient outcomes.

AI is accelerating the growth of the pharmaceutical industry and bringing revolutionary changes through the discovery and development of convergence new drugs. E-VAI is a representative analysis and decision-making AI platform developed by Eularis. It uses machine learning algorithms along with an easy-to-use user interface to generate an analytical roadmap for pharmaceuticals based on competitors, key stakeholders, and current market share to predict key drivers of pharmaceutical sales. The vast chemical space consisting of more than 1060 molecules promotes the development of numerous drug molecules. However, until now, the drug development process has been limited due to a lack of advanced technology, making it time-consuming and expensive. These problems can now be solved through AI. It can recognize hits and lead compounds, providing faster validation of drug targets and optimization of drug structure design.

Bibliography

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