

## Advances in the application of machine learning in nursing

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### *Abstract*

Artificial Intelligence (AI) has increasingly developed in recent years and shown huge potential in multiple areas, especial medical and nursing. As the key part of the Artificial Intelligence, Machine Learning (ML) plays an important role in analyzing health-related data and building learning models. Some algorithms have huge advances in dealing with nursing issues such as predicting readmission, predicting emergency visiting and relevant factors of some specific chronic problems, for example, Geriatric Depression, Heart Failure and etc. This paper explains how algorithms applied in different nursing scenarios and gives out simple introductions of these algorithms, including regression analysis, decision tree, reducing dimension algorithm, convolution model and so on. By analyzing how the machine learning technologies worked with nursing data in the fields of nursing management and nursing quality improvement, we hope to provide new ideas and new methods to nurses on how to deal with clinical issues in the background of Big Data and promote the development of precision nursing in the future..