With the continuous progress of society and the continuous development of new media, people will face more and more information in their daily life, including a large number of information. In the real world, these large amounts of data are often marked because of high costs, or time constraints, In order to solve these problems, active learning technology or deep learning technology is used to select valuable information from unlabeled data for manual annotation and build annotated data sets to improve the efficiency and effect of news mining.

In order to explore the feasibility of using active learning method to train Bert model for news text classification, this study used the data set obtained by the crawler to test the learning effect, and used the depth learning method and TextCNN to use active learning method to train Bert. The advantages and disadvantages of bert model and textcnn are verified by experiments.