Fake consumer review detection has attracted much interest in recent years owing to the increasing number of Internet purchases. The approaches to detect fake consumer reviews use the review content, product and reviewer information and other features to detect fake reviews. The semantic meaning of reviews might be particularly important for text classification. In addition, the emotions hidden in the reviews may represent another potential indicator of fake content. To improve the performance of fake review detection, neural network models that integrate traditional bag-of-words as well as the word context and consumer emotions. Specifically, the models learn document-level representation by using three sets of features n-grams, word embeddings and various lexicon-based emotion indicators. Such a high-dimensional feature representation is used to classify fake reviews.