

EXTRACTING DRUG-DRUG INTERACTION IN BIOMEDICAL RESOURCES USING BI-LSTM

MANISHA PRIYA L
M.E.COMPUTER SCIENCE
SATYAM COLLEGE OF ENGINEERING AND TECHNOLOGY, KANYAKUMARI

The discovery of drug–drug interaction (DDI) is not only critical in understanding the mechanism of medicine, but also aids in preventing medical error and controlling healthcare costs. When physicians or pharmacists prescribe multiple drugs simultaneously to a single patient, DDI can be a crucial piece of information to keep the patient from experiencing adverse reactions or any other potential physical harm. Therefore, it is necessary to extract DDI for human healthcare and medicinal safety. Researchers have studied this using the literature mining methods. Recently, biomedical resources have been applied successfully in literature mining tasks, such as machine reading. Because biomedical resources contain a large amount of valuable information, we attempt to leverage this resource to provide professional knowledge in the procedure of DDI extraction. We propose a new bidirectional long–short-term memory (LSTM) network-based method, namely, biomedical resource LSTM (BR-LSTM), which combines biomedical resource with lexical information and entity position information together to extract DDI from the biomedical literature. We conducted experiments on the SemEval 2013 task 9.2 data set to evaluate our method. BR-LSTM outperforms the other state-of-the-art methods and achieves a competitive F-score of 0.7115.