## REFERENCES


1. https://www.pharmaceutical-journal.com/publications/tomorrows-pharmacist/drug-development-the-journey-of-a-medicine-from-lab-to-shelf/20068196.article?firstPass=false
2. Schatz, S.N., & Weber, R. (2018). Adverse drug reactions. British Medical Journal, 363.
3. https://www.ncbi.nlm.nih.gov/pubmed/16808549
4. https://www.who.int/medicines/areas/quality_safety/safety_efficacy/pharmvigi/en/
5. http://broughttolife.sciencemuseum.org.uk/broughttolife/themes/controversies/thalidomide
6. http://apps.who.int/medicinedocs/en/d/Js4893e/5.html
7. http://www.pharmexec.com/pharma-companies-can-solve-social-media-adverse-events-reporting-problem-and-stop-worrying
8. https://www.fda.gov/media/122835/download
9. https://www.iqvia.com/
10. https://www.iqvia.com/solutions/integrated-global-compliance/safety-and-pharmacovigilance
11. P Tafti, A., Badger, J., LaRose, E., Shirzadi, E., Mahnke, A., Mayer, J., Ye, Z., Page, D. and Peissig, P., 2017. Adverse Drug Event Discovery Using Biomedical Literature: A Big Data Neural Network Adventure. JMIR Medical Informatics, 5(4), p.e51.
12. Lee, K., Qadir, A., Hasan, S., Datla, V., Prakash, A., Liu, J. and Farri, O., 2017. Adverse Drug Event Detection in Tweets with Semi-Supervised Convolutional Neural Networks. Proceedings of the 26th International Conference on World Wide Web, pp.705-714.
13. Yang, X., Macdonald, C. and Ounis, I., 2017. Using word embeddings in Twitter election classification. Information Retrieval Journal, 21(2-3), pp.183-207.
14. Liao, S., Wang, J., Yu, R., Sato, K. and Cheng, Z., 2017. CNN for situations understanding based on sentiment analysis of twitter data. Procedia Computer Science, 111, pp.376-381.
15. Sarker, A. and Gonzalez, G., 2015. Portable automatic text classification for adverse drug reaction detection via multi-corpus training. Journal of Biomedical Informatics, 53, pp.196-207.

16. Owoputi, O. & O'Connor, B. & Dyer, C. & Gimpel, Kevin & Schneider, N. & Smith, N.A.. (2013). Improved part-of-speech tagging for online conversational text with word clusters. Proceedings of NAACL-HLT. 2013. pp.380-390.
17. https://nlp.stanford.edu/software/tagger.shtml
18. https://www.nlm.nih.gov/research/umls/
19. Ofoghi, Bahadorreza & Siddiqui, Samin & Verspoor, Karin. (2016). READ-BioMed-SS: Adverse drug reaction classification of microblogs using emotional and conceptual enrichment.
20. Sarker, A., Malone, D. and Gonzalez, G., 2017. Authors' Reply to Jouanjus and Colleagues' Comment on "Social Media Mining for Toxicovigilance: Automatic Monitoring of Prescription Medication Abuse from Twitter". Drug Safety, 40(2), pp.187-188.
21. Wolpert, D., 1992. Stacked generalization. Neural Networks, 5(2), pp.241-259.
22. Zhang, Z., & Nie, J. (2015). AN ENSEMBLE METHOD FOR BINARY CLASSIFICATION OF ADVERSE DRUG REACTIONS FROM SOCIAL MEDIA.
23. Jonnagaddala, J., Jue, T.R., & Dai, H. (2015). BINARY CLASSIFICATION OF TWITTER POSTS FOR ADVERSE DRUG REACTIONS.
24. O'Connor, K., Pimpalkhute, P., Nikfarjam, A., Ginn, R., Smith, K. L., & Gonzalez, G. (2014). Pharmacovigilance on twitter? Mining tweets for adverse drug reactions. AMIA ... Annual Symposium proceedings. AMIA Symposium, 2014, 924–933.
25. Kandula, S., & Zeng-Treitler, Q. (2010). Exploring relations among semantic groups: a comparison of concept co-occurrence in biomedical sources. Studies in health technology and informatics, 160(Pt 2), 995–999.
26. Airola, A., Pyysalo, S., Björne, J., Pahikkala, T., Ginter, F. and Salakoski, T., 2008. All-paths graph kernel for protein-protein interaction extraction with evaluation of cross-corpus learning. BMC Bioinformatics, 9(S11).
27. Pyysalo, S., Airola, A., Heimonen, J., Björne, J., Ginter, F. and Salakoski, T., 2008. Comparative analysis of five protein-protein interaction corpora. BMC Bioinformatics, 9(S3).
28. Jang, H., Lim, J., Lim, J., Park, S., Lee, K. and Park, S., 2006. Finding the evidence for protein-protein interactions from PubMed abstracts. Bioinformatics, 22(14), pp.e220-e226.

29. Rinaldi, F., Schneider, G., Kaljurand, K., Hess, M., Andronis, C., Konstandi, O. and Persidis, A., 2007. Mining of relations between proteins over biomedical scientific literature using a deep-linguistic approach. Artificial Intelligence in Medicine, 39(2), pp.127-136.
30. Fundel, K., Kuffner, R. and Zimmer, R., 2006. RelEx--Relation extraction using dependency parse trees. Bioinformatics, 23(3), pp.365-371.
31. Kang, N., van Mulligen, E. and Kors, J., 2011. Comparing and combining chunkers of biomedical text. Journal of Biomedical Informatics, 44(2), pp.354-360.
32. HUANG, M., ZHU, X., & LI, M. (2006). A hybrid method for relation extraction from biomedical literature. International Journal Of Medical Informatics, 75(6), 443-455.
33. Buchholz S, Marsi E (2006) CoNLL-X shared task on multilingual dependency parsing. Proceedings of the Tenth Conference on Computational Natural Language Learning. Pp 149-164.
34. https://ctakes.apache.org/
35. Gurulingappa, H., Mateen-Rajput, A., & Toldo, L. (2012). Extraction of potential adverse drug events from medical case reports. Journal Of Biomedical Semantics, 3(1), 15.
36. Yang, Z., Lin, H., & Li, Y. (2010). BioPPISVMExtractor: A protein–protein interaction extractor for biomedical literature using SVM and rich feature sets. Journal Of Biomedical Informatics, 43(1), 88-96.
37. Bui, Q., Katrenko, S., & Sloot, P. (2010). A hybrid approach to extract protein-protein interactions. Bioinformatics, 27(2), 259-265.
38. D. Zelenko, C. Aone, A. Richardella. (2003) Kernel methods for relation extraction.The Journal Of Machine Learning Research.
39. R.C. Bunescu, R.J. Mooney [2005]. A shortest path dependency kernel for relation extraction.Proceedings of the Conference on Human Language Technology and Empirical Methods in Natural Language Processing, 724-731.
40. Schuemie, Martijn & Jelier, Rob & Kors, Jan & Nl, J. (2007). Peregrine: Lightweight gene name normalization by dictionary lookup. Proceedings of the Biocreative 2 workshop.
41. Kang, N., Singh, B., Bui, C., Afzal, Z., van Mulligen, E., & Kors, J. (2014). Knowledge-based extraction of adverse drug events from biomedical text. BMC Bioinformatics, 15(1).

42. Huang, Y. (2005). Improved Identification of Noun Phrases in Clinical Radiology Reports Using a High-Performance Statistical Natural Language Parser Augmented with the UMLS Specialist Lexicon. Journal of The American Medical Informatics Association, 12(3), 275-285.
43. Demner-Fushman, D., Chapman, W., & McDonald, C. (2009). What can natural language processing do for clinical decision support?. Journal Of Biomedical Informatics, 42(5), 760-772.
44. Huh, J., Yetisgen-Yildiz, M., & Pratt, W. (2013). Text classification for assisting moderators in online health communities. Journal Of Biomedical Informatics, 46(6), 998-1005.
45. http://wordnet.princeton.edu/
46. Niu, Y., Zhu, X., Li, J., & Hirst, G. (2005). Analysis of polarity information in medical text. AMIA . Annual Symposium proceedings. AMIA Symposium, 2005, 570–574.
47. https://radimrehurek.com/gensim/models/word2vec.html
48. Pancoast, S., & Akbacak, M. (2012). Bag-of-Audio-Words Approach for Multimedia Event Classification. INTERSPEECH.
49. https://en.wikipedia.org/wiki/Tf-idf
50. https://www.lexigram.io/lexipedia/medical-taxonomy-terminology-hierarchy/
51. https://www.nlm.nih.gov/research/umls/
52. https://searchhealthit.techtarget.com/definition/SNOMED-CT
53. Leaman, R., Islamaj Dogan, R., & Lu, Z. (2013). DNorm: disease name normalization with pairwise learning to rank. Bioinformatics, 29(22), 2909-2917.
54. Leaman, R., Khare, R., & Lu, Z. (2015). Challenges in clinical natural language processing for automated disorder normalization. Journal Of Biomedical Informatics, 57, 28-37.
55. https://www.meddra.org/how-to-use/support-documentation/english
56. Ramos, Juan. (2003). Using TF-IDF to determine word relevance in document queries.
57. https://en.wikipedia.org/wiki/Conditional_random_field
58. Nikfarjam, A., Sarker, A., O’Connor, K., Ginn, R., & Gonzalez, G. (2015). Pharmacovigilance from social media: mining adverse drug reaction mentions using sequence labeling with word embedding cluster features. Journal Of The American Medical Informatics Association, 22(3), 671-681.

59. Siwei Lai, Liheng Xu, Kang Liu, and Jun Zhao. (2015). Recurrent convolutional neural networks for text classification. In Proceedings of the Twenty-Ninth AAAI Conference on Artificial Intelligence, 2267–2273.
60. Lee, Ji & Dernoncourt, Franck. (2016). Sequential Short-Text Classification with Recurrent and Convolutional Neural Networks. 515-520.
61. https://developer.twitter.com/en/enterprise
62. https://scikit-learn.org/stable/
63. https://www.nltk.org/
64. https://tartarus.org/martin/PorterStemmer/
65. https://nlp.stanford.edu/projects/glove/
66. https://keras.io/