Project number: CS20

Project Client: School of Computer Science

Project Title: Mining social network postings for monitoring prescription medication abuse

Project Description and Scope:

Prescription medication abuse and overdose are the fastest-growing drug-related problem in the USA. The growing nature of this problem necessitates the implementation of improved monitoring strategies for investigating the prevalence and patterns of abuse of specific medications. The primary aims are to assess the possibility of utilizing social media as a resource for automatic monitoring of prescription medication abuse and to devise automatic techniques for identifying and assessing the extent of abuse of various prescription medications.

Students are expected to build on top of previous state-of-the-art methods under the guidance of the supervision team (you will not feel that you are alone in this project) and establish better performance using deep learning and natural language processing. You will be provided with a code and datasets.

[Important] Contact usman.naseem@sydney.edu.au, If you have any questions.

Expected outcomes/deliverables:

Research findings, code and dataset Specific required knowledge, skills, and/or technology

Specific required knowledge, skills, and/or technology:

The student(s) should have a good command of natural language processing (COMP5046)

and deep learning (COMP5329) or have equivalent experiences in the application of image

processing and natural language processing techniques.

Resources provided by the client:

https://downloads.spj.sciencemag.org/hds/2022/9851989.pdf

https://link.springer.com/article/10.1186/s13011-022-00442-w

Related general fields/disciplines:

Data Science/Analytics;NLP;