

Detecting Mental Disorders in Social Media Through Emotional Patterns - The case of Anorexia and Depression

ABSTRACT:

Millions of people around the world are affected by one or more mental disorders that interfere in their thinking and behavior. A timely detection of these issues is challenging but crucial, since it could open the possibility to offer help to people before the illness gets worse. One alternative to accomplish this is to monitor how people express themselves, that is for example what and how they write, or even a step further, what emotions they express in their social media communications. In this study, we analyze two computational representations that aim to model the presence and changes of the emotions expressed by social media users. In our evaluation we use two recent public data sets for two important mental disorders: Depression and Anorexia. The obtained results suggest that the presence and variability of emotions, captured by the proposed representations, allow to highlight important information about social media users suffering from depression or anorexia. Furthermore, the fusion of both representations can boost the performance, equaling the best reported approach for depression and barely behind the top performer for anorexia by only 1%. Moreover, these representations open the possibility to add some interpretability to the results.

SYSTEM REQUIREMENTS:

HARDWARE REQUIREMENTS:

- System : Pentium i3 Processor.
- Hard Disk : 500 GB.
- Monitor : 15'' LED
- Input Devices : Keyboard, Mouse
- Ram : 4 GB

SOFTWARE REQUIREMENTS:

- Operating system : Windows 10.
- Coding Language : Java
- Web Framework : Flask

REFERENCE:

M. E. Aragon, A. P. Lopez-Monroy, L. -C. G. Gonzalez-Gurrola and M. Montes, "Detecting Mental Disorders in Social Media Through Emotional Patterns - The case of Anorexia and Depression," in IEEE Transactions on Affective Computing, doi: 10.1109/TAFFC.2021.3075638.