CSC 400 Assignment: ITRG Miniproposals

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Big data to help you have a healthy heart

Motivation

Today, as people’s life space become more and more fast, the pressure of competition more and more serious, and as they face more and more complex situation, human constantly encountered new bad experiences that they didn’t encounter before. Insomnia, depression, anxiety and other psychological diseases become people’s real big trouble. Different from ordinary physical illness, mental illness is not easy to prevent, and once people encountered they are not easy to overcome without long-term nursing. This kind of diseases brought great inconvenience to people's life. In many cases, people are becoming unhappy and depressed, even though they gain more material benefits than ancient people.

Content

The role of the big data on human should not only aim to help people to predict who will be the next President of the United States, or predict what people like and recommend to them, big data completely have the ability to give people a happier life. The series of research projects is to do data collection, processing, mining and analysis based on people’s emotion and psychological data, objectively telling people how to prevent, deal with a variety of mental illness, earning their happier life. The value of this series of project is obvious.

Approach

Research projects can have different methods, and social media cross-platform data mining is one of the effective approaches that has been proved to benefit millions of people. As for me, I want to do some research to mine the important factors of people’s happiness. We can use the keywords of twitter [1] (“happiness”, “love”, “enjoy” and etc.) to do all kinds of analysis and evaluate one person’s happiness index. After that, from facebook[2], Instagram[3]’s image data and other types of data we can get people’ s interests, hobbies, friends, relationships, family status, religious beliefs and etc, we can also get his career information such as occupation from Linkedin[4]. Based on these huge amount of information, we can do comprehensive data analysis, getting a series of useful conclusions. For example, which interest is the most important one to make people happy, also, making friends with what kind of people, with how many people can let a person get biggest satisfaction to life. We always depend on a series of subjective speculations to tell people how to get happiness, such as that we need to work hard and keep good relationship with people, learn to relax, or get a pet, etc., but the big data will be more objective,
it will directly tell us which activity is beneficial, what seems to be useful, but actually make no sense.

For a variety of mental illnesses, we can also adopt the same method. I want to do something related to depression, I will collect data of patients to judge who have been in this kind of problem. We will further collect different kinds of data for these patients, especially the patients who eventually recovered from mental illnesses, we will get useful information from their texts, pictures and other information to explain the cause of depression, and present the treatment that can make people back in love. Big data will be one of the most intuitive way that can tell us the efficient method to treat illness, and also tell as in what situation we should pay attention to prevent them.

In addition, to let us understand more about happy people’s life, data mining can totally mine their life pattern and style. We can get all the information from his photo, text even GPS. All this things will tell people why his life is more happy than you. We should always learn from others, not only others’ ability, but others’ outlook. My research could tell you these details.

People’s psychological problem is obviously different from physical illness, for physical illness, as long as we use the appropriate medicine, we will cure, but for mental illness people’s self-adjustment is more important, and big data can tell us what kind of work is effective, what kind of adjustment is a shortcut.

Prequisites
But to achieve the projects, some supports are needed, especially the data. We need the patient’s data and we also need other people’s data as comparison, for part of the data we can directly call social media API to get, but for a lot of data it doesn't work, maybe we need to the collaboration with hospital or some others. In order to gain more benefits, we need to collect data from many aspects and exert their potential. As for the cost of the project itself, it will not be high, because everything can be run on the computer, we don't need extra spending, this is also the advantage of computer science project.

Hoping this project can achieve breakthrough, eventually make a contribution to the happiness of human being.

Reference

[1] https://twitter.com/