

Psychic Tendency in Artificial Intelligence to Predict Human Psychological Healthcare Crisis

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Abstract - As we see in today's era psychic tendency of general peoples is weakening some of the reasons behind it is that the Natural disaster by which we affected recently in 2 years which has created an severe healthcare nuisance amongst world, similarly working in closed environment without being dissolved into our colleagues, friends emotions, these are some things which are constantly resulting in some of the severe human health problems like Anxiety, Depression, Suicidal thoughts, Bipolar manic disorders etc. In USA it is reported that the 47000 youngsters of America are under danger each year through psychological health problems. It is the 10th largest healthcare problem in United States. As we see from 1930 to 1950 when the base of actual human machine correlation established by Georges Artsrouni and Peter Troyanski till date the accuracy between the human emotions and the Computer machine has not been positively increased and somehow still has problems. In this Conceptual theory on psychic tendency in natural language programming and artificial intelligence to predict human psychological problems we have encouraged some of the problems regarding this manner to be solved which should help solve this Human psychological healthcare crisis.

Keywords: Natural Language Processing (NLP), Artificial Intelligence (AI), Natural Language Toolkit (NLTK).

1. INTRODUCTION

Human nervous system is one of the highly complex structures of a body which ingeniously transforms human neural signals to brain behavior, thinking and actions. It is through nervous system only that all other systems of our body work. It passes information from internal system to external. For example, when we put hand in scalding water, it causes pain to us in which the neural system sends immediate signals to brain to move out your hand from that substance. In Artificial intelligence although it is an immensely mature subject still till date scientific disagreements are there regarding whether AI can predict human emotions or not. Some of the artificial intelligence modules are developed to detect spiritual state category like happiness, sad, anger, disgust, surprise, fear, excitement etc. by mapping the facial expressions although it is not successfully worked. This study was the substantial failure towards the emotion based artificial intelligence. Some scientists and enthusiasts criticized regarding the ability of AI in this manner because as we can see faces does not tells the truth always about what the person is feeling. The person might be miserable from inner side and if a show nothing on the face then the AI module fails to do its work.

2. SYSTEM DESIGNING

So how should we tackle these problems is recognized in this research, basically it is a conceptual theory by understanding Human Nervous System, Human Neural Networks with chemical compositions produced in body and NLP with AI. It is also in correlation with the biological memory that a human being perceives so that a human can understand and remembers the things happened in the past. The poor side of AI is the datasets is not that much able to recall the things for a period of time? This study also includes the working of neurotransmitters and some of them which are linked with psychological intents of human being like serotonin, Melatonin, Dopamine, Glutamate and some of the terms like understanding amygdala, hippocampus and Prefrontal Cortex at the end afterwards we will see how we can combine this study to help tackle psychological health problems with Natural Language Processing and AI.

To measure computational study of all these limbic systems the important aspect also joins to this study which we call it as Neuroimaging Technology. Radiology which evolved two of the world known neuroimaging tests which are qCT Computed Tomography and qMRI Magnetic resonance imaging, "q" is for quantitative radiology. qMRI technique basically certifies special findings about brain and demonstrates the cross sections, boundaries of the cortex and another ones, how intense the signals are and there characteristics, functionality of amygdala, biochemical properties of neural tissues etc. however this study continues with the intense technologies like SPECT (Single Proton Computed Tomography) and PET (Positron emission tomography).

Substitute study to be performed using AI

Although as we know the exercises are made from 19th century till date to favor artificial intelligence and developments on Natural language processing to develop great AI modules but the implementation of the devices that has been made has not succeeded except few cases like siri, alexa and Google’s smart voice assistant etc. As we see the below given graph we can relate the study that has been done on Human Machine Intelligence and the actual implementation in the market.

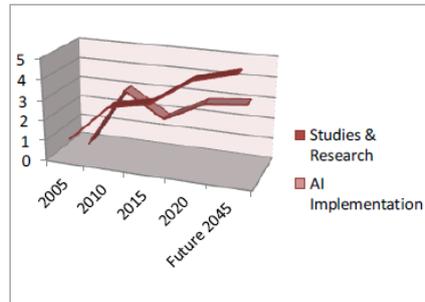


Chart -1: Representation of Studies & Implementation of Emotion based AI Technologies

One of the reasons which is causing hurdle to achieve technological advancements in human machine intelligence is that this field includes a rich diverse fields which should be studied like to predict psychic tendency of humans it should include Neurology, Radiology, Computer science scholars, IT Professionals because the programmers who are working in order to get the result have less knowledge of Neurology and Brain science as compared to that of a particular Neurologist and Radiologist. Machine learning is using software to reproduce biological structures, such as neurons. That aside, An Human neuron can only fire about 200 times a second also having speed of 70-120 m/s i.e. around 150 – 300 miles per hours, a single neuron can be a single piece of data, but many transistors are involved on every single CPU tick. What computers are lacking is parallelism.

3. ACTUAL CONCEPTUAL THEORY OF IMPLEMENTATION

As we have previously studied that our central nervous system is connected with brain and in which the limbic architecture consists of 4 important parts which are Amygdala, Hippocampus, Hypothalamus and limbic cortex which is generously evolved in the emotions which a human being perceives. Let us assume that if we gone through the special tests in which we know the functioning of our these 4 parts and if we able to calculate the chemical hormone releases in the human body we can bridge this by programming with artificial intelligence and can make huge difference in predicting Human psychological problems. We will also go through the 4 important brain harmonic chemicals Serotonin, Dopamine, Glutamate and Norepinephrine.

The final important brain chemical is Norepinephrine which is produced itself by brain, adrenal glands and CNS and can the levels can be tested by the test of catecholamine. It is one of the neurotransmitter and stress hormones which are directly linked with the stress management of the human body.

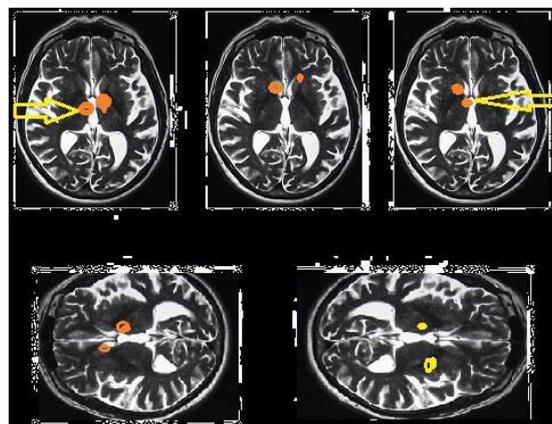


Figure 2: Brain scan through qMRI showing Amygdala of persons in happy and sad emotional state

The whole concept of stating this brain science theory is that we need a joint mechanism to conduct these tests at a point and the test results should be converted into the programming of an AI Module which will define the actual meaning of Emotions based artificial intelligence module if we succeed to achieve this result then we can easily develop an AI Machine. As shown in below diagrams the MRI of brain shows that what state the person is actually going through not accurate as this much by combining the chemical results but recommendable.

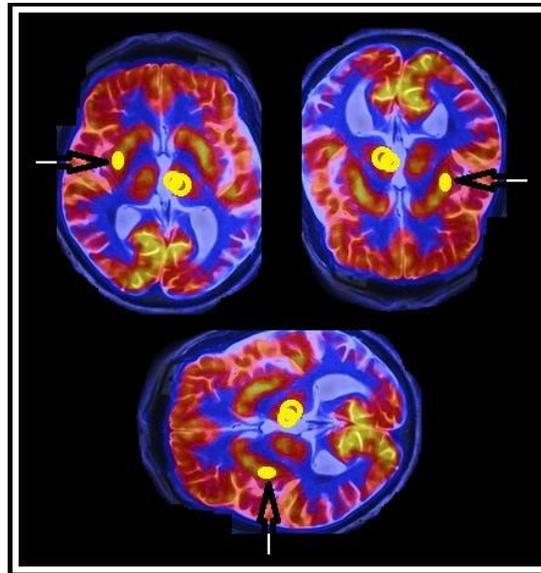


Figure 3: Single proton computed tomography brain scan for Amygdala measurement

4. CONCLUSIONS

We have seen the limbic architecture and how it is important in emotions forming in human being the main part is the brain chemical formed and testing all the values and combing with AI module we got the psychic tendency prediction of emotional state of particular human being. The main factor is even if the result from AI system and if the prediction goes wrong still we can start counseling of particular person which will definitely help the suicidal attempts now a days.

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