



Emotional Intelligence: An Artificial Learning Model Assistance for Psychological Development

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Abstract

A-Emotional Intelligence, the amalgamation of psychological attributes such as self-awareness, self-regulation, motivation, empathy, and social skills, may be attributed as the essential intangible possession of an individual. The process of acquirement or development of the such emotional state, begins from the moment of actual realisation of one's emotional wellbeing at any given point of time. The paper strives to integrate the powerful tools of data science along with the profound knowledge of psychologists, to create a smart and sustainable aid for the future. The aided tool, shall be able to identify the present mindset of any given individual and portray the effects of their current state of emotion. This unique attempt of utilisation of resources to aid an individual to self-analyse and develop oneself, through the utilisation of au courant technologies is a unique spectre of research choice. Thus, the research paper initiates a succourer role to attain the practice of attainment about the necessitated skill of the aeons.

1. Introduction

As quoted by Stephen R. Convoy, "When you listen with empathy to another person, you give that person psychological air", the pressing need of encompassing psychological wellbeing of an individual, through an empathetic listener, is the new prerequisite to the creation of a sustainable human existence. The World Health Organization (WHO), in its World Mental Health Report 2022 (Charness and Boot), signifies the fact that, the mental health needs are ginormous in nature, but the responses are indefinitely inadequate, i.e., the major gaps and imbalances are in terms of information and researches, resources and services, a wholesome facet. The solution to such an intricate, lie in the development of a multisectoral intervention, which shall integrate human knowledge resources along with robust tech-

nologies. The research paper, aims to designate the process to design an emotional intellect, an artificial learning model to evaluate the emotionalism of an individual at any given point of time. The system as a whole, sets sight on the focused enablement of developable personality traits.

Interestingly, on comparison with the existing systems (Assunção et al.) it is noted that the smart models of this decade have often been portrayed as an ideation buzz of commercialization, but the question to cater the human needs of the world, as a mandatory social and sustainable contribution through uncommercialized scopes, in this paper have been to put to utilisation for overall social goodness and wellness. On the whole, the research paper initiates a model to collaborate various organisations, professionals, students, citizens and indi-

viduals, to conjointly build a decision-making and problem-solving model that shall plan, forecast and recommend a solution to avow per se personality and psychological development.

2. Related Work

The prevalence of the system of intelligence throughout this decade has embarked on versatile applications and usages. Natural Language Processing Systems (NLPS) (Bonnefon, Feeney, and De Neys), a boon to the industrialised sector, puts the best use of its domain to the creation of email filters (WHO et al.), auto correction and auto completion (Selenko et al.), spam detection, sentiment analysis and more such applications. Also, the in-depth analysis of translations, image analysis such as retinopathy diabetes, cancer cell detection, noise filters and more, have all surfaced throughout the phase. Yet the pathway to accomplish global motos such as Sustainable Development Goal (SDG) 3, good health and wellbeing, by volunteered public and private partnership, SDG 17, through SDG 9, sustainable industry, infrastructure and innovation remains unexplored!

It is noted that individuals of every sector or a system, which includes education, labour and employment; delve into a common point of incompetence, an emotional level of incompetence, at a point in decision-making, which often ends up as a catastrophe. The previous research study (D'mello, Tay, and Southwell), also suggests the urgent need of standardisation and formalisation of next - generation data science profession and education. Do people of different sectors, different job roles, different age groups, really commit a serious blunder of choice, despite an overabundance of information? Statistics say so; therefore, it is high time that the existing systems are fine tuned to adopt a new strategy or model which shall overcome the human ambit of emotional negligence through minimal techno guidance. (Cao et al.)

3. Emotional Intellect Assistance Model

The proposed smart model has been ideally designed to be developed in six different stages such as message extraction, basic preprocessing and lemmatization, Natural Language Processing (NLP) implementation, data model creation, prediction and evaluation and finally the release of a real time application.

In stage I, the messages alias the textual raw datum shall either be web crawled or extracted from various public sources and (or) approved social media contents upon the call of various Application Program Interfaces (API).

In stage II, the raw datum, stored in the form of a comma separated file, shall be cleaned to remove outliers and other annotations through methods of split, noise removal and normalisation. The normalised content shall further be advanced to next level preprocessing that include tokenization, stop word removal and lemmatization.

The second stage's lemmatized input shall be further be treated to a format of an NLP, by means of labelling and encoding techniques. This step is indeed crucial in terms of the involvement of an external factor, the peer review of the psychologist, towards adoption of a precise definition of each pre-existing textual emotion and its perspective application.

The fourth stage involves a precisely defined input to be trained, validated and tested with values recently classified and tagged in the previous stages.

In the pre-final stage, the newly created model shall further be evaluated for appropriate metrics to indicate the accuracy and losses encountered upon model creation. The stage is as crucial as the previous stage, as it shall be double checked to ensure that the model does not suffer from overfit or underfit scenarios. In cases of an undesired desired result, the model shall be re-engineered in aspects of feature engineering and epoch training, thereby eliminating fallacies.

In stage VI or the final stage, it shall be seen that the model shall be put to use in a real time application front with apt user interfaces featuring simple and efficient usage.

4. Related Work

The implementation strategy adopted by the research paper, is a one stop solution i.e., a point of commonality to the collective problems of various spectres. (L. Chen, P. Chen, and Lin) A dedicated user interface shall be built to adapt and adopt versatile people towards the proposed smart intellect's mode of assistance. A set of implementable scenarios have been briefed below:

To start from the education sector, students post examinations', often possess a mental trauma

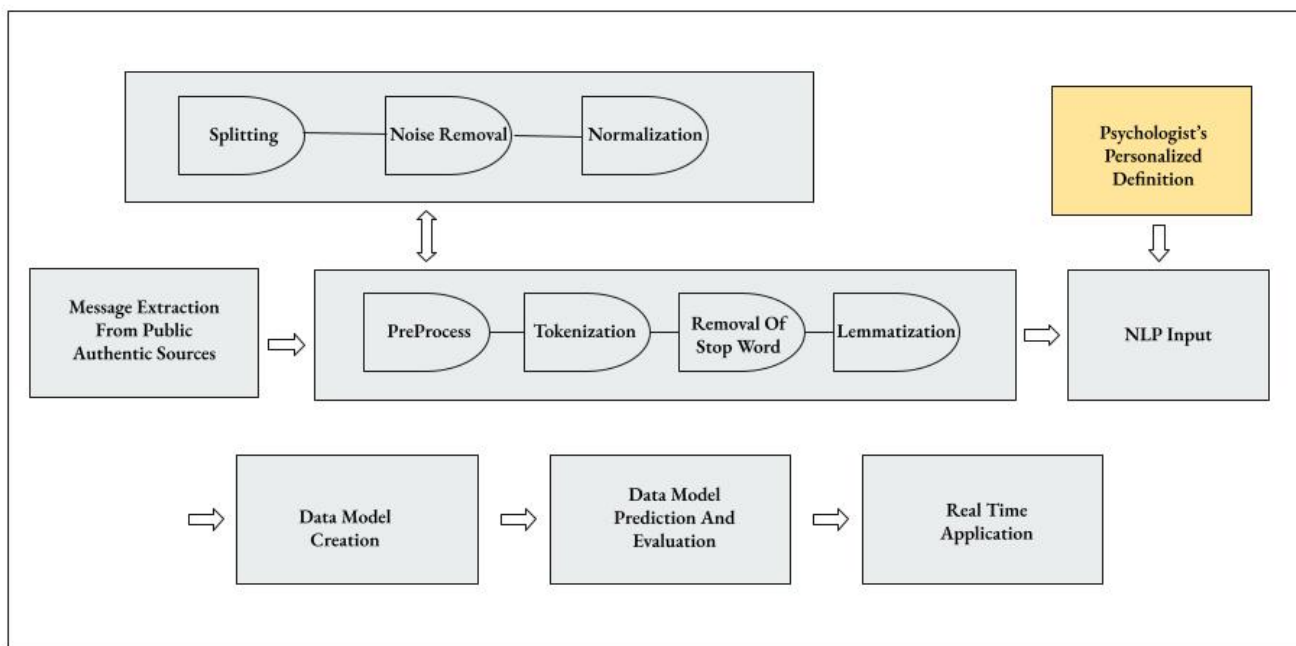


FIGURE 1. Process Flow Of The Artificial Psychological Assistance Model

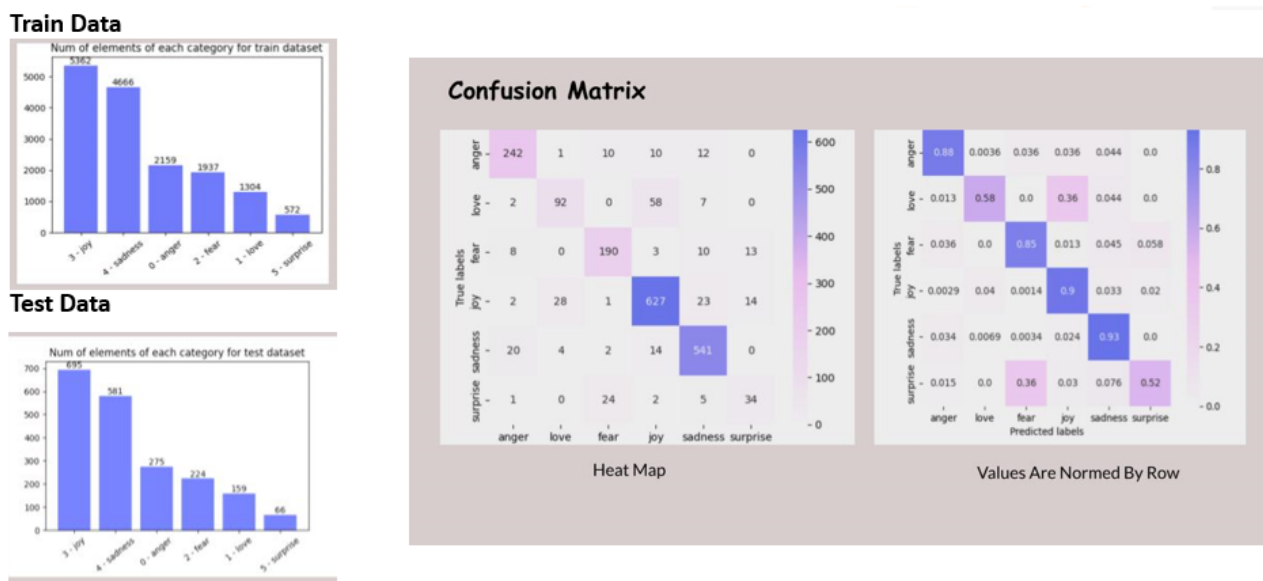


FIGURE 2. Data Metrics For The Smart Emotional Intellect

towards estimating their results and grades. Statistically, the National Crime Record Bureau (NCRB)'s Accidental Deaths and Suicide in India (ADSI) report of 2020 indicate that more than 34 students die by suicide each day. Unfortunately, the pattern followed in the subsequent year has witnessed a steady rise of approximately 4.5%, which indeed is a cause of concern. (Subramanian et al.) The

emotional intellect, the proposed system, finds the situation as a scope of implementation, to detect each individual's emotion post the examination. The magnanimous lot of student community, shall be able to perceive one's current state of emotionality in order to find right assistance too, if needed. (Storrs and W Fleming)

Athletes' cynosure is ethics and discipline. The

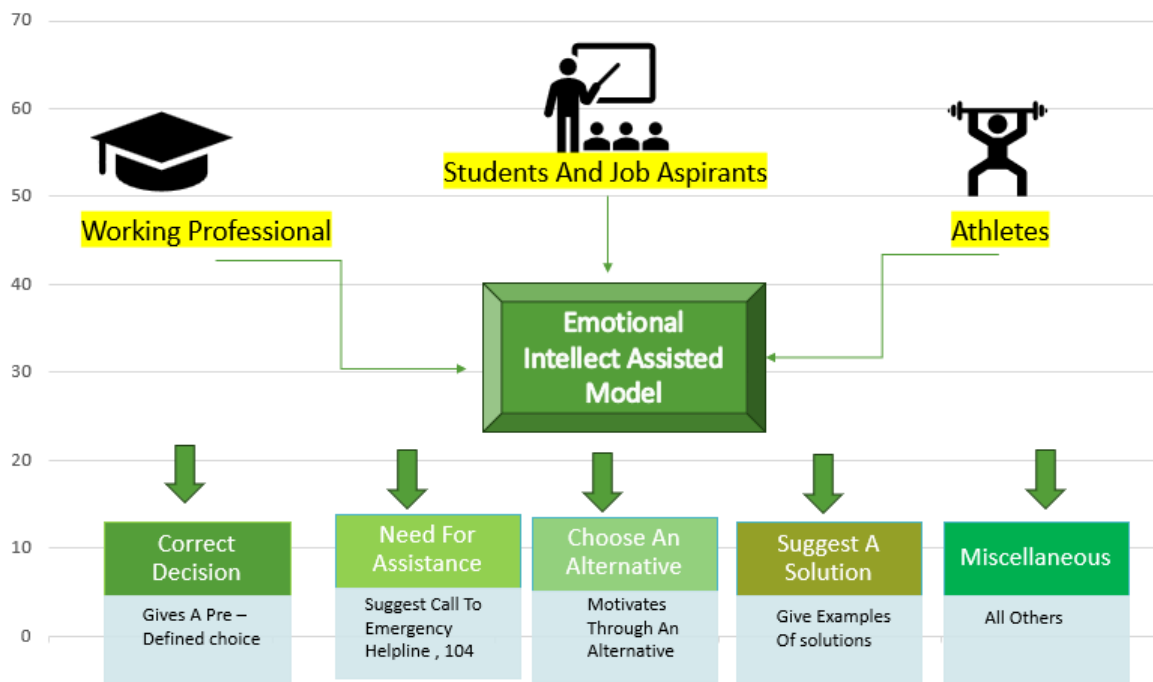


FIGURE 3. Versatile Area of Application of The Emotional Intellect

World Anti-Doping Code (Code), post the 2021 inception denotes the percentage of doping positives still remain 0.65%. Will an emotional intellect assist the affected individuals to realise the value of good health and wellbeing?

Also, the world has witnessed two major job crunches and economic breakdowns in years 2008 and 2020. Depression, mental anxiety owing to job replacements, money crunch, termination, crop losses, catastrophic credential losses and more, is yet again another area of concern. Availability towards assistance to each individual with a dedicated life coach or a motivator in situations of overall human helplessness, is a question. The situation demands a human build, human like, smart techno assistance and the proposed idea of smart intellects, shall indeed aid to deter similar emotional mishaps. (Jiang and Lu)

5. Open Issues and Future Work

The proposed research work, requires a set of dedicated professionals of different fields to collaborate on inter- disciplinary and multidisciplinary front to create a competent system for the future.

On broader terms, the proposed work shall be incorporated and tailored to fit almost all the sec-

tors of existence. It shall find scope to attachments especially, once funded through various initiatives of governance that encourages a public private partnership model. Also, the research work shall further be extended to become a humanoid, to enhance the scope of celebration of accomplishments, through timely integrations.

6. Conclusion

The suggested artificial assisted psychological model, upon realisation as a project, under proper development and deployment as a portable and pocket friendly application, shall further self -empower human beings in efficient emotional management. Thus, the paper initiates a global sustainable mental wellbeing of every individual with aided emotional intellects.

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Authors’ Note

The author certifies that the paper titled “EMOTIONAL INTELLIGENCE: AN ARTIFICIAL

LEARNING MODEL ASSISTANCE FOR PSYCHOLOGICAL DEVELOPMENT” is the bonafide work of Ranjitha R. The author declares that there is no conflict of interest regarding the publication of this article. The author confirms that the paper is free of plagiarism.

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