

## Human Intelligence to Artificial Intelligence Critical thinking and Emotional Intelligence \*1M. Angelin Rosy, <sup>2</sup>M. Felix Xavier Muthu, <sup>1</sup>S. Alfiya

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**Abstract:** Artificial Intelligence may be it is branch of computing. The computer science engineering is creating intelligent machines and especially intelligent computer programs. AI could also be how of making a computer. A computer-controlled robot or software thinks intelligently. AI is accomplished by studying the way to think human brain. How humans learn, decide, and work while trying to unravel a haul. We also create intelligent machines. It is often developing human activities. Some human activities are reading, listening, each and are going to be covered. Machine learning, deep learning may be a part of this AI. The AI projects have a machine control and remote. Mostly AI is machine learning. Current status will be there from AI. Feature goals in AI. Computing system study that plan to model and applying human brain. It is a branch of computer simulating a intelligent behavior. The machine capacity is intimate human behavior. The intelligence has some types are going to be there, linguistic intelligence, musical intelligence, logical-mathematical intelligence, spatial intelligence, intra-personal intelligence, interpersonal intelligence and so on. Ability to calculate a system, reasoning, perceives a relationships and analogs, learn from experience. Store and retrieve information from memory. Solving a problems and complex ideas to use tongue fluently classifying. Generalize and adapt new situation

## 1. INTRODUCTION

People can reason about virtually any issue, and lots of problems could also be solved. Simple and highly complex behavioral repertoires are often learned throughout the lifespan. Importantly, there are widespread individual differences within the ability to reason, solve problems, and learn which cause human differences within the general ability to deal with challenging situations. Artificial Intelligence (AI) may be a branch of Science which deals with helping machines find solutions to complex problems during a more human-like fashion. This generally involves borrowing characteristics from human intelligence and applying them algorithms during a computer way. Artificial Intelligence may be a new electronic machine that stores great deal of data and process it at very high speed. The computer is interrogated by a people via a teletype It passes if the human cannot tell if there's a computer or human at the opposite end. It is the science and engineering of creating intelligent machines, especially intelligent computer programs. It is associated with the similar task of using computers to know human intelligence.

**Philosophy of Intelligence:** While exploiting the facility of the pc systems, the curiosity of human, lead him to wonder, "Can a machine think and behave like humans do?" Thus, the event of AI started with the intention of making similar intelligence in machines that we discover and regard high in humans. However, these activities must be integrated. (I) adapt our behavior to the environment; (ii) selecting the foremost appropriate contexts; or (iii) changing the earth when adaptation and selection are not an option. In our view, the mixing of cognitive functions and skills depends on the very general capacity we call "general intelligence" or g for brief. This integration is consistent with g as ability or as an emergent property of the brain.

*Contributes To Intelligence:* Artificial intelligence may be a science and technology supported disciplines like computing, Biology, Psychology, Linguistics, Mathematics, and Engineering. A major thrust of AI is within the development of computer functions related to human intelligence, like reasoning, learning, and problem solving. Out of the subsequent areas, one or multiple areas can contribute to create an intelligent system. Continual learning is a basic skill in biological intelligence that is used to learn a new task without forgetting previous ones. How a biological neural system learns multiple tasks at different times is a challenging research topic. In 1990, the two-

photon microscopy technique made it possible to observe the in vivo structures and functions of dendritic spines during learning at the spatial scale of single synapses With this imaging system, research-ers in the 2010s studied neocortical plasticity in the brain during continual learning. The results revealed how neural systems remember previous tasks when learning new tasks by controlling the growth of neurons Inspired by the observation of biological neural systems, a learning algorithm termed EWC was proposed for deep neural networks. This algorithm controlled the changes in the network parameters when learning a new task, such that older knowledge was preserved,

Intelligence and Brain: Exploring the relationships between human intelligence and therefore the brain requires a careful consideration of the structure of human intelligence. As researchers state that they are measuring intelligence by means of the standard Progressive Matrices Test (SPM - as another example) they're telling an imprecise story because the SPM measures gulps spatial and reasoning abilities plus SPM specificity. The exact combination of those "ingredients" for the analyzed sample must be computed before saying something clear about the measured performance. This requires that studies use a battery of tests rather than just one test. Although this was not usually done for the early functional imaging studies of intelligence, it is now more common. Results from the older and therefore the newer studies, however, point to the importance of both whole brain and specific brain networks. Ability refers to variations in performance on some defined class of mental tasks. Ability reflects observable differences in individuals' performance on certain tests or task. However, this performance involves the synthesis of a spread of abilities: "spatial ability," as an example are often considered an inexact concept that has no formal scientific meaning unless it refers to the structure of abilities that compose it. The problem of defining (and measuring) intelligence is that the problem of defining the constructs that underlie it and of specifying their structure. For more than a century, psychologists have developed hundreds of tests for the standardized measurement of intelligence with varying degrees of reliability and validity The resulting measures allowed for the organization of taxonomies identifying a minor and major cognitive ability. J. B. Carroll for instance, proposed a 3 stratum theory of intelligence after the extensive reanalysis of quite 400 data 0 sets with thousands of subjects from almost 20 different countries round the world. It shows a simplified depiction of the taxonomy of cognitive abilities. The factor analytic studies supports the view that intelligence has a hierarchical structure (i.e., like a pyramid). There is strong evidence for an element Orepresenting general intelligence (g) located at the apex of the hierarchy (stratum III). This g factor provides an index of the extent of difficulty that a personal can handle in performing induction, reasoning, visualization, or language comprehension tests. Lower order within the hierarchy (stratum II), several broad ability factors are distinguished: fluid intelligence, crystallized intelligence, general memory, beholding, auditory perception, retrieval cognitive speed. Stratum I is predicated on specific abilities, like induction, lexical knowledge, associative memory, spatial relations, general sound discrimination, or ideational fluency.

A Distributed Brain Network for Human Intelligence: Supported the commonalities found in their analysis, they proposed the Parietal-Frontal Integration Theory (PFIT), identifying several brain areas distributed across the brain. These P-FIT regions support distinguishable information science stages. A similar commonality between intelligence and dealing memory was found in animal studies. Mattel and Kolkata reviewed several reports during which performance of laboratory mice was measured during a sort of attention and learning tasksA front parietal network may be relevant for intelligence, but also for working memory. A study by Gray et al tested whether fluid or reasoning ability (Gf) was mediated by neural mechanisms supporting working memory. Sixty participants performed verbal and nonverbal working memory tasks. They had to point if a current item matched the item they saw 3 items previously (3-back). Brain activity was measured by event-related functional magnetic resonance imaging (fMRI). The demand for working memory varied across trials.

White Matter: The relationship between human intelligence and therefore the integrity of substantia Alba has been much less investigated, although this trend is changing rapidly. Diffusion tensor imaging (DTI) is predicated on the diffusion of water molecules within the brain and provides information about the dimensions, orientation, and geometry of myelinated axons. DTI can produce measures that include fractional anisotropy (FA), mean diffusivity (MD), radial diffusivity (RA), and axial diffusivity (AD), which allow for the assessment of myelin and axonal integrity Cognitive computing can be simply understood as a technical field that integrates multiple technologies and aims to use artificial mechanisms based on computing technology to realize the human cognitive function. It is the core technical field of cognitive science. In essence, cognitive computing is expected to understand the internal relationships among various kinds of data and phenomena in the real world through technologies, such as AI, pattern recognition, and machine learning, and further develop tools and systems to improve productivity, protect the environment, and contribute to social governance.

*Networks for Human Intelligence:* Above from this attitude, study testing the hypothesis that prime levels of intelligence involve more efficient information transfer within the brain. Studying a sample of participants, brain anatomical networks were constructed by tensor tractography. These networks included intrahemispheric and interhemispheric connections. The pyramidal tract, and the inferior fronto-occipital fasciculus. The sample was divided between average and high intelligence consistent with scores on the Wechsler scales. Higher global efficiencies were the latter group: higher intelligence was found to display shorter characteristic path and a better

global efficiency of the networks. This was interpreted as a characteristic of a more efficient parallel information transfer within the brain anatomy.

## 2. CONCLUSION

Regardless of the utilization of exploratory (correlation) or confirmatory (experimental) approaches, we do accept as true with Kennedy: "as with more \_eras', it's the underlying technology that creates the age possible New advances in acquisition, analysis, data basing, modeling, and sharing will continue to be necessary." This is especially true for analyzing human intelligence because this psychological factor is undoubtedly rooted in widely distributed regions in the brain. Frontal and parietal lobes likely comprise crucial processing areas for intelligence, but integrity of hard connections across the entire brain or spontaneous harmonic co activation among distant regions appear also to be relevant. Creating a comprehensive picture for what are often called "neuronintelligence" should prove as challenging because it is exciting.

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