International Journal of Science and Research (IJSR)

ISSN: 2319-7064 SJIF (2022): 7.942

A Review on Contemporary Approaches in Bio Informatics

Amitesh Kumar Singam^{1, 2}, Venkat Reddy Pashike², Muhammad Shahid³

¹Jönköping University, Department of Science and Education, Gjuterigatan 5, Box 1026, 551 11 Jönköping, Sweden

²Blekinge Institute of Technology, School of Engineering (AET) 371 79 Karlskrona, Blekinge, Sweden Email: *amiteshsingam42[at]gmail.com*

Abstract: In collaborative Research, the working principle of functional coding and its translations for Human Visual System has been clearly stated by author et al.[8],[10],[6] and moreover, we also included research aspects and its respective methodology in [9]. Apart from Human Visual characteristics, Spatial and temporal features of Human Visual System(HVS) is always vital for evolution of channel capacity which is practically explained in following papers by author i.e, [3],[4],[5],[7] and moreover we concluded that our future work lies on transmission of data which represents "DNA" after saturation point within dedicated channel while considering concepts of bio informatics.

Keywords: Bio Informatics, Theoretical NeuroScience, Applications of Computational Biology and Neural Networks

1. Introduction

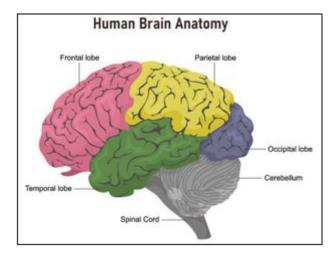
In general, Psychological set points refers to the baseline at which rate of pulse or impulse rate will effect human behavior, its chemical compositions refers to Allotrope of oxygen which is based on circadian clocks, activation of selected neurons for particular time is working fundamental for sleep / wake up cycle. This psychological fatigue leads to disorders due to stress stimuli which appears occasionally due to mental illness within human behavior. The set points are referred to number of neurons which are dedicated to control pulse rate within heart and temperature which include set points towards discharge rate of pulse.

2. Undergoing Process of Biological Rhythm, Error Analysis

In previous paper, As we discussed about misconception of Neuro Genesis, to be precise our subjects were undergoing biological process i.e, an ongoing process of steady state equilibrium in the subject's functionality towards chemical compositions based on medical translations with respect to psychological disorders (due to Altered Neuron stated) in our case as author stated at [9]

3. Lobes of Human Brain

The most complex and core organ of human body is composed of billions of neurons which communicates accordingly through numerous connectivity and synapses. In general, brain weight may differ between respective gender i.e, men, women and transgender individuals; mainly the male brain weights around 1336 grams and so the female comes in around 1198 grams, moreover the difference in weight doesn't shown any effect on functionality or intelligence[1]. The three main divisions within human brain are cerebrum, cerebellum, brain stem.



The cerebrum consists of two cerebral hemispheres the outer layer so called the cortex and secondly the inner layer. There are four lobes in the cortex, the frontal, parietal, temporal and occipital lobe.

4. Suprachiasmatic Nucleus and Hypothalamus

As we discussed in our previous research work which is mostly concerned on circadian timing system i.e., sleep wakeup cycle and Human visual System [9], mostly suprachiasmatic nucleus (SCN) is the vital nuclei of the circadian timing system and it regulates most circadian rhythms in the body [2] and within circadian timings system, biological rhythms are understandable by medical translations and functional coding defines this biological rhythm [9]. Finally, below figure illustrates details of individual Nucleus i.e, respective core of neuron is translated by their names and in our case its Suprachiasmatic nucleus (SCN). Moreover, detailed description of individual neuron is stated by author et al. [10]. Dysfunction in functionality within brain frequency in circadian system have been found to correlate well with various mood and sleeping disorders and in our case its schizophrenia and its

Volume 13 Issue 2, February 2024
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
www.ijsr.net

Paper ID: SR24204030104 DOI: https://dx.doi.org/10.21275/SR24204030104

International Journal of Science and Research (IJSR) ISSN: 2319-7064

SJIF (2022): 7.942

advancement i.e, psychosis disorder. Place table titles above the tables.

Moreover, SCN is a bilateral structure located in the anterior part of the hypothalamus. It plays major role in the retino hypothalamic i.e, originating from photosensitive ganglion cells of the retina. Efferent projections from the suprachiasmatic nucleus innervate structures such as the pineal gland, producing melatonin during the night for induction of sleep [2].

5. Conclusion: Implications of Data

No clinical records were extracted, and data is available on request and moreover codes along with data is available at Github and Research Gate community.

References

- [1] Hartmann, P., Ramseier, A., Gudat, F., Mihatsch, M. J., &Polasek, W. (1994). Das Normgewicht des GehirnsbeimErwachsenen in Abhängigkeit von Alter, Geschlecht, Körpergrösse und Gewicht [Normal weight of the brain in adults in relation to age, sex, body height and weight]. *Der Pathologe*, 15(3), 165–170.
- [2] Hastings, M.H., Maywood, E.S. & Brancaccio, M. Generation of circadian rhythms in the suprachiasmatic nucleus. Nat Rev Neuroscience 19, 453-469 (2018). https://doi.org/10.1038/s41583-018-0026-z
- [3] Shahid, M., Singam, A.K., Rossholm, A., &Lövström, B. (2012). Subjective Quality Assessment of H.264 AVC Encoded Videos for Low Delay Applications.
- [4] Singam, A.K. (2023). Coding Estimation based on Rate Distortion Control of H.264 Encoded Videos for Low Latency Applications. ArXiv, abs/2306.16366.
- [5] Singam, A.K. (2023). A Review on Just Noticeable Difference(JND) Quality Metric towards its Drawbacks and Limitations. SSRN Electronic Journal.
- [6] Singam, A.K., & Author Humans in Loops for Deep Learning Transfer based on Principles of Recursive Neural Networks.
- [7] Aamitesh Kumar Singam, Venkat Raj Reddy Pashike, Muhammad Shahid et al. Reduced Complexity of Motion Estimation in Pixel Domain based on Rate Distortion Control, 27 December 2023, PREPRINT available 1) at Research [https://doi.org/10.21203/rs.3.rs-3811138/v1]
- [8] Singam, A.K., Pashike, V.R., & Shahid, M.A. (2023). An Error Concealment based on Translations of Neural Networks. SSRN Generalized Electronic Journal.
- [9] Singam, Amitesh Kumar; Shahid, Muhammad (2023). A Practice of Science Theory and Its Hypothesis. Preprint. https://doi.org/10.6084/m9.figshare.24846525.v7
- [10] Singam, A.K., & Shahid, M.A. A Just Resembling Translations of Feed Forward and Back Propagation Neural networks.

Author Profile



Amitesh Kumar Singam received the bachelor's degree from Jawaharlal Nehru Technological University, Hyderabad in 2008 and M.S. degrees in Electrical Engineering from Blekinge Institute of Technology in 2012, respectively. During 2013-2022

worked in govt based food cooperation private Ltd as a volunteer (career break) due to financial losses, later he restarted his career as Author / editorial assistant as recorded in web of science, in International Journal of Science and Research and he is also working as Reviewer for Web of Science/ Publons /Clarivate/ Plos one and simultaneously he published 17 scientific papers as preprint and few of them are cited in Open access. From 2022 to present he is active member in Research Gate community and also member of IEEE since 2022.