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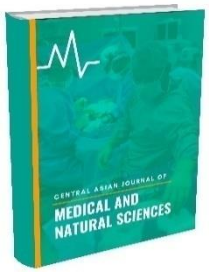

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An Analytical Study of Development in Response to the COVID-19 Pandemic

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Abstract: The common cold, severe acute respiratory syndrome, and Middle East respiratory syndrome are all examples of disorders that can be caused by coronaviruses, which are a family of viruses. The year 2019 saw the discovery of a novel coronavirus as the pathogen responsible for an outbreak of sickness that began in China. The virus is currently referred to as the severe acute respiratory syndrome coronavirus 2. Coronavirus sickness 2019 is the name given to the illness that it produces. The outbreak of COVID-19 was classified as a pandemic by the World Health Organization in April of 2020. In the midst of these crises in Asian nations, the majority of natural and naturalistic medical practises help us the society without a vaccine; therefore, here we describe how the system of electropathy helps to exit the pandemic. A precondition for the development of standalone and integrative treatment options is the creation of an ayurvedic clinical profile of COVID-19. Clinicians trained in Ayurvedic medicine do not have access to COVID-19 patients working in conventional medical settings.

Key words: COVID-19, Electropathy, Modern herbal medicine, Spagyric medicine.

Introduction

Image segmentation is a necessary step in the process of medical image processing, and its purpose is to divide an image into a number of sections that share similar qualities by making use of a set of predetermined measurement criteria [1]. In past decades numerous picture segmentations have been presented to increase segmentation performance. The purpose of segmentation is that the pixels in the same region have similar qualities, i.e., pixels from different regions have distinct qualities [2]. Image segmentation using double-scale non-linear thresholding was on the vessel support region. When compared to the other approaches that are accessible, it generates a finer segmentation; however, the

accuracy is decreased [3]. This method has the drawback of requiring the user to select their own threshold value in order to differentiate between the image particles and the noisy images [4-12].

This strategy not only increases the segmentation performance as a whole but also creates output that is dependable [13]. On the other hand, there are several restrictions, and it is difficult to train segmentation using image-level annotations. It results in a high degree of precision. However, it concentrates only on the colour of the pixels and does not concern about the other characteristics of the image [14]. This was done in an effort to solve the concerns described above. It functions best with images that are uniform in intensity and clear of background noise. FCM has several restrictions when it comes to picking the parameters and finding the common borders amongst clusters [15-22]. In order to circumvent these limitations, this approach does not call on any prior information in order to do segmentation [23].

However, due to the absence of spatial information, this approach does not function particularly well when applied to photos that contain a lot of noise. FCM segmentation with spatial constraints for medical images is used as a solution to this problem. The concept of segmentation was presented [24-27]. The procedure for clustering makes advantage of the spatial information that may be extracted from the photos. However, structural information and gradient information are required in order to achieve more optimal segmentation at the edges. These two types of information are essential [28]. These limitations, which include determining the threshold value and curve function, locating the common borders of the clusters, and selecting the optimal parameters, are present in all of the currently available methods of segmentation [29]. These limitations, which can be remedied by using the proposed Gradient Orientation Mapping Based Fuzzy C-Mean clustering method, in which there is no need for any prior information like threshold value and curve function, are addressed [30-35]. For the purpose of segmentation, this innovative method incorporates both spatial and structural information [36].

Additionally, certain image characteristics, such as the edge, which outlines the limits of the lung, and the entropy, which categorises the various lung textures and intensities, are also taken into account. In order to increase the performance of segmentation, other features, such as colour and gradient, are also used [37]. Thus, the various portions of the images are segmented nicely. The field of dentistry has seen enormous progress across all of its medical subspecialties. Because of these advancements, there is a pressing need for a diagnostic instrument that is more accurate. Images of the lungs have also found applications in contemporary dental practise [38-41]. The results of this work were utilised to isolate the entirety of the mouth from a single photograph. It made the difficult work more approachable for the purpose of inspection. This article provides a comprehensive assessment of recent developments in imaging technology as well as their applications in various dental specialties [42-49]. To obtain a high-quality image of the lung, the deep learning method is applied in the image partitioning process in order to achieve accurate prediction. Although the previous study made use of a variety of methodologies, the proposed work fares exceptionally well in comparison to the previous work [50].

In this body of work, they have applied a set of criteria in order to acquire trustworthy information for the optimal treatment strategy [51]. The terms "Reliable Crown Vertical Position" (RVCP), Absolute Crown Vertical Position, Axis angulation, and "Crown overlapping area" are the acronyms for the characteristics that are employed (COA). Both the ACVP and the COA are novel parameters, and as such, they require more time and are more challenging to locate [52-55]. In order to carry out the segmentation process, they utilised a tooth contour propagation approach [56]. Using this approach causes it to have significant problems due to the accumulation of errors over time [57]. The instability of the result is one of the drawbacks of the work that has been offered. to get around this potential obstacle. The panoramic dental X-ray image is being processed with a deep learning technique using

this methodology that has been proposed. Because it emits less radiation, the panoramic dental X-ray is the method of choice. This provides a view of the image in a two-dimensional format [58-65]. The lung arch is seen here in what is intended to be an orthogonal perspective on this panoramic dental X-ray. To attain a high level of accuracy in the retrieved panoramic image, a deep learning strategy is used as the technique [66]. The researchers are primarily concerned with improving the accuracy of the segmentation that may be accomplished and demonstrated by utilising the proposed algorithm for segmentation [67].

The channels are represented by small grids of numbers, and the number of cells in each grid is augmented by information districts [68]. The focal point of the channel is moved so that it is aligned with each pixel in the information layer, and the size of the channel is increased so that its area of contribution is proportional to the size of the channel [69-75]. This process is repeated for all pixels, with the exception of those that do not have a sufficiently large neighbourhood, which results in an initiation guide that is of a considerably more manageable size [76-80].

The redundant process of applying the channel over the image can be visualised as the channel sliding over the image, which is why the process is called convolution. The initial level of information is continually expanded upon via a channel [81]. The CNN Classifier's Pooling Layer consists of: Utilizing a pooling layer is an alternative strategy that can be utilised to manage contract input volume regions [82-85]. Instead of doing duplicate tasks with channels containing already prepared loads, the pooling layer collects data over larger areas. The limit of the area where aggregation is typically accomplished also serves as the source of the name of the maximal pooling layer [86].

The idea that it doesn't matter where the locality has to include been located as long as it has been found is what makes a max-pooling layer effective for the grouping task. This is the instinct behind the success of the max-pooling layer [87-91]. When you take the limit of an area of activation, you cut out the irrelevant parts of that district and get a report on the presence of the element throughout the full area [92]. The fact that this factor was not recognised in the majority of the area would have a detrimental impact on significant beginnings in the event that averaging was utilised rather than the most extreme value [93-101]. There are not any trainable parameters for the pooling layer [102].

Down-inspecting is the most common and typical usage of the pooling layer. In this scenario, a walk is organised so that districts are not covered [103]. One single channel is looking through all of the data in the database for a certain piece of information. There are many points of interest that can be discovered in a picture [104]. In this approach, there is a requirement for several channels. When many channels are used, each channel generates its own enactment map. This results in a large number of initiation maps that are together referred to as the yield volume. In this manner, a data picture has the potential to be transformed into far more volume (remember the distinction between the profundity of volume, meaning a third measurement and profundity of the neural system as various layers) [105-111]. Intuitively, as data is transformed from input picture to output features over the system, the territory of information volumes is decreasing with an applied walk and pooling, while the depth of information volumes can cause both increases and reductions depending on the number of channels that are utilised in convolutions [112-117].

A system that uses convolutions Typically, there are three distinct types of layers that make up structure [118]. The layer could be convolutional, it could be pooling, or it could be totally associated. There are unique principles that govern the forward, incorrect, and reverse propagation of signals inside each layer [119-121]. There are no specific guidelines or rules that dictate how the structure of the separate layers should be put together. CNNs are often divided into two halves, although there are exceptions made for cases of late advancement [122]. The first part of the process is known as feature extraction, and it employs a combination of pooling and convolutional layers [123]. The second phase

is known as categorization, and it makes use of layers that are entirely connected with one another [124-129].

Since the system is responsible for regulating the physical and chemical consistency of the cell as well as the harmonious interaction between the blood and the lymph, the "vitiation of blood or lymph" is the root cause of the sickness. The system is capable of providing an accurate diagnosis, or temperament [130].

It is the interaction of the spike protein of the coronavirus with its complement host cell receptor that is the primary factor in determining the tissue tropism, infectiousness, and host range of the virus. For instance, human cells can become infected with the SARS coronavirus when the virus attaches itself to the angiotensin-converting enzyme 2 (ACE2) receptor [131-137].

It is common knowledge that SARS-CoV-2 appears to be optimised for binding to the human acceptor ACE2 (angiotensin-converting enzyme) and that the SARS-CoV-2 spike (S) glycoprotein binds to the cell membrane protein angiotensin-converting enzyme 2 (ACE2) in order to enter human cells. This information has been available for quite some time [138].

It has been demonstrated that COVID-19 can attach to ACE2 by utilising the S protein that is found on its surface. During an infection, the S protein is split into the subunits S1 and S2 by a process called cleavage. Coronaviruses are able to connect directly to the peptidase domain (PD) of ACE2 because S1 contains the receptor binding domain (RBD). Therefore, it is likely that S2 is involved in the process of membrane fusion [139-144].

Orthocoronavirinae or Coronavirinae is the family name for coronaviruses in the scientific world. They are classified as alpha coronaviruses, beta coronaviruses, gamma coronaviruses, and delta coronaviruses. Alpha and beta coronaviruses infect mammals, while gamma and delta coronaviruses usually infect birds [145]. The epidemiological history and a Real-Time Reverse Transcription Polymerase Chain Reaction (rRT-PCR) from a nasopharyngeal swab are used to form the basis of the clinical diagnosis. When diagnosing COVID-19, several forms of immune identification technology, such as point-of-care testing (POCT) of IgM/IgG to detect antibodies generated against the virus in the blood, are utilised [146-151].

The majority of people who have COVID-19 have symptoms that are mild to moderate, but the condition can cause significant medical consequences and even cause death in some people [152]. People who are elderly or who already have one or more chronic medical illnesses have a significantly increased risk of being gravely ill from COVID-19 [153].

In the realm of electropathy, the practise of healing, as an art form, is of critical significance. It encompasses a variety of approaches or procedures for treatment [154]. The information from Persian Traditional Plants described by Avicenna in the Canon of Medicine and several more current scientific databases, with a focus on angiotensin-converting enzyme inhibitory activity of the plants of the synergistic action of Electropathy medicine work as a prophylactic, palliative, and curative treatment for patients [155-159]. Electropathy, a form of alternative medicine, has been shown to be effective in treating a variety of viral conditions. In order to defeat the illness, the medicines known as Cochlearia Cp. (S1), Polygala Cp. (P9), Allium Cp. (Verm1), and Rhondereon Cp. (RE) each function in their own unique way inside the body [160].

During a pandemic, preventive medicines are an extremely efficient means of preventing the spread of infection and lowering the risk to the nation or territory as a whole. According to Electropathy, the Cochlear a Cp [161]. Works as the finest prophylactic therapy for any sort of viral sickness. This is because immunity is highly crucial for the prophylactic activity. Cochlearia cp is loaded with the

protein (amino acids), vitamins (A and C), and minerals (iron and zinc), all of which are necessary for a healthy immune system and may be found in high quantities in the plant [162].

The Cochlearia Cp. plant has an exceptionally high vitamin C content. It is also possible that it can inhibit the growth of bacteria and work as a laxative [163]. It has been suggested as a treatment for rheumatism, dropsy, and venereal illnesses due to its reputation as an effective blood purifier. Additionally, it is prescribed for patients suffering from gout, arthritis, stomachaches, and fluid retention [164]. It is helpful for urinary bladder problems and in this way increases renal function. Additionally, it is beneficial for heart disease since it helps relieve fluid retention. Indigestion is alleviated, the development of gas is halted, the metabolism is stimulated, and it can be taken as a tonic. Because it contains a lot of vitamin C, it is an effective preventive. After giving delivery, this medicine is excellent for warding against infections and is highly recommended. The abundance of minerals that it contains, such as iron and iodine, helps to control the activity of glands and stimulates hunger [165].

The cough and congestion that are caused by colds, asthma, fever, the flu, pleurisy, hoarseness, and catarrhal issues can be treated with Polygala CP [166]. It is used to treat coughs and bronchitis, reduce excess mucus, alleviate sore throat and chronic nasal congestion, and reduce excess mucus production. It is an excellent source of vitamins A, C, and niacin, all of which are necessary for maintaining healthy vision as well as a functioning immune system. The antispasmodic activity is utilised in the treatment of hiccups, as well as colic, asthma, cough, and sore throat. Additionally, it is utilised in the treatment of breathing issues such as bronchitis, whooping cough, asthma, and other respiratory diseases.

In order to rid the body of worms and provide relief from an intestinal illness, allium cp. is utilised. It has a direct effect on the mucosal membrane of the intestine, which causes an increase in peristalsis and promotes the growth of beneficial flora in the intestine, hence reducing the risk of infection by pathogenic bacteria. In addition to having a germanium content that can be measured, which is a mineral that helps the body's immune system, this substance is also very effective in healing wounds. By assisting in either lowering or raising the body's requirement for insulin, it is helpful for managing glucose tolerance in situations where the sugar levels in the body are either high or low. In addition to this, it helps to lower blood cholesterol levels and protects against the constriction of arteries.

The substance that can be found in allium cp. Produces in the liver the enzymes necessary for Alfa toxin's destruction. Worldwide, alpha toxins are responsible for the vast majority of cases of liver cancer. It treats constipation and stimulates the bowels at the same time. In addition to this, it assists in bringing the fever under control, and the bacteria increase blood circulation and revitalise the blood. It is an effective detoxifier that protects against contaminants as well as the toxicity of metals. It is good for the health of the heart. Additionally, it has a nourishing and beneficial effect on the lungs, spleen, and stomach. Both the symptoms of tuberculosis and pulmonary gangrene can be alleviated as a result. It has antibacterial properties and reduces inflammation and infection in the digestive tract.

It is used as a treatment for certain types of arthritis as well as rheumatism due to the Rhododendron Cpantirheumatic's diaphoretic, and diuretic properties. It raises the temperature of the body, stimulates the desire to drink, and causes diaphoresis, also known as an increased outflow of various secretions or excretions. Because it contains molecules that interfere with the electrical activity of nerves, it is able to alleviate the pain that is linked with certain disorders.

The task can be broken down into its two primary components, which are the selection of natural compounds and medicinal plants. Each component is comprised of three individual steps. According to the information presented in the main text, the oral effectiveness of the compounds under consideration is an essential factor in the selection process. On the other hand, the plants under

consideration for the plant selection portion ought to be compatible with the traditional applications of herbal treatment in traditional Chinese medicine. Traditional Chinese Medicine Systems Pharmacology is abbreviated as TCMSP.

The COVID-19 competition is currently in its third stage in India. In order to recover from the coronavirus, it is recommended that face masks be worn, that social distance be maintained, and that gatherings of more than a few people in public areas be avoided at all costs. Additionally, the act of spitting in public spaces ought to be made illegal. Sanitizers for the hands need to be used. It has been argued that nations in which elderly people live in the same communities as younger people should enforce more stringent and restricted mitigating measures than nations in which old people live in institutions separate from younger people.

Drones are used to carry supplies to places like hospitals, pharmaceutical companies, and research laboratories. This is the most efficient and risk-free approach. Because of this, there will be less danger for the medical staff. People are having a hard time affording their most fundamental need. Companies that bring groceries to customers' homes, such as BigBasket, allow customers to avoid leaving their homes in order to shop for groceries. The mobile phone industry has developed a system for the global sharing of data that is capable of tracking persons all over the world to help control the spread of the coronavirus. In the event of a lockdown, information regarding those measures can also be broadcast in the street using drones. Drones are also being put to use in agriculture in order to boost both productivity and the overall growth of the crop. Drones used in agriculture provide farmers with a bird's-eye view of their properties.

Additionally, the farmers can use the drones to survey their crops so that they can cultivate them on a more regular basis according to their preferences. It is utilised to spray insecticides, allowing farmers to remain inside their homes while also lowering the possibility of being attacked by formers. By staying in the same location as their patients and using phones, medical professionals are able to keep tabs on those who have been infected with the coronavirus. By connecting credit card-sized portable labs to mobile phones, medical professionals are able to monitor their patients remotely. A patient merely needs to attach a plastic chip to their mouth in order to make use of this, after which the information is sent directly to the office of the attending physician via a specialised app that provides precise findings. People who previously worked in software businesses are now working from the comfort of their own homes. Because they keep their supervisors and HR up to speed on their job, they don't have to go into the office and can instead relax at home.

Ayurvedic physicians should evaluate the patient's prognosis and make prompt referrals to secondary or tertiary care facilities, depending on the patient's condition, in accordance with the pragmatic action plan that has been described above. When treating COVID-19 patients or persons who may have been infected with SARS-COV-2, extra and extreme caution should be exercised at all times. If this plan of action is carried out, there is a significant possibility that new knowledge and creative ideas will be gained. As a result, accurate documentation is essential. As a result, it has been proposed that, in each scenario, the vital documentation of the essential key variables should be carried out. These variables should include age, gender, symptoms, geography, contact history, Ayurvedic diagnosis including a yoga and rogi Bala examination, improvement or worsening of symptoms, Ayurvedic medicine(s) with dosage, the outcome of the management, referral to secondary/tertiary care, symptoms controlled, cured, and mortality if any of these conditions occur. It is also important to capture any follow-up instructions given to the patient upon discharge or the discontinuation of drugs.

Conclusion

The previously processed CT images of the lungs are next subjected to the computation of three different types of performance metrics (comprising PSNR, MSE, and Entropy). The effectiveness of

the data collection can be judged based on how accurate the classifications are. It is in the confusion matrices where one can find the highest documented classification accuracy. The Ayush system that has been suggested has successfully generated an accuracy rate of 97.6 percent. The proposed methodology displays improved sensitivity while also reducing the amount of time required for computation. The work that was done and the results do not deviate from the path that the research is taking. In the future, the scope of the work will focus on developing a novel way to determine the precise location of lung nodules, as this information is in ongoing demand. This study demonstrates that it is possible to develop provisional Ayurvedic clinical classifications of COVID-19 in consultation with modern medical doctors who are treating COVID-19 patients in an environment where regulations do not allow Ayurvedic doctors to directly manage COVID-19 patients. This was accomplished in spite of the fact that Ayurvedic doctors are not permitted to directly manage COVID-19 patients. To further develop the strategy that is discussed in this study and to establish a procedure that can be validated at the point of care, studies that involve a larger number of patients are required. Because Ayurvedic treatment is individualized, it is essential for Ayurveda professionals working in hospital settings to have more in-depth conversations with patients who have tested positive in order to refine clinical profiling.

Conflict of Interest

The authors have no conflict of interest regarding this investigation.

References

1. Narin, Ali, Ceren Kaya, and Ziynet Pamuk. "Automatic detection of coronavirus disease (COVID-19) using X-ray images and deep convolutional neural networks." *arXiv preprint arXiv:2003.10849* (2020).
2. CesareMattei: Father of Spagyric Homeopathy by DebasisKundu (Asian Journal of Ethnopharmacology and medicinal foods)
3. Molecular immune pathogenesis and diagnosis of COVID-19 –Journal of Pharmaceutical analysis.
4. Haq, M. A., Azam, M. F. & Vincent, C. Efficiency of artificial neural networks for glacier ice-thickness estimation: A case study in western Himalaya, India. J. Glaciol. 67, 671–684 (2021).
5. Haq, M. A. CNN Based Automated Weed Detection System Using UAV Imagery. Comput. Syst. Sci. Eng. 42, 837–849 (2022).
6. Haq, M. A. & Khan, M. Y. A. Crop Water Requirements with Changing Climate in an Arid Region of Saudi Arabia. Sustainability 14, 1–24 (2022).
7. Haq, M. A. Intellligent sustainable agricultural water practice using multi sensor spatiotemporal evolution. Environ. Technol. (United Kingdom) (2021) doi:10.1080/09593330.2021.2005151.
8. Haq, M. A., Khan, M. A. R. & Alshehri, M. Insider Threat Detection Based on NLP Word Embedding and Machine Learning. Intell. Autom. Soft Comput. 33, 619–635 (2022).
9. S.Vasanthakumari , Bizuneh Wakuma ," Nomophobia – Smartphone Addiction," CCNE Digest,vol. 7, no.1,p. 1-4,2019.
10. S.Vasanthakumari ," Effectiveness of stress reduction technique on the level of stress among HIV infected children," The Journal of Nursing Trendz ,vol. 7, no.01,p. 10-15,2016.
11. S.Vasanthakumari ," Transformational Leadership – A Model for Motivating Innovation," CCNE Digest,vol. 7, no.2,p. 1-4,2019.

12. S.Vasanthakumari ,Werku Etafa , " Emotional Intelligence in the Workplace," CCNE Digest,vol. 6, no.4,p. 1-4,2019.
13. Werku Etafa, Getahun Fetensa, Reta Tsegaye, Bizuneh Wakuma, Sundararajan Vasantha Kumari, Getu Bayisa, et al, "Neonatal sepsis risk factorsin public hospitals in Wollega zones, Ethiopia: case control study," PAMJ - One Health, vol. 7, no. 2, p.1-13,2022.
14. Haq, M. A. Development of PCCNN-Based Network Intrusion Detection System for EDGE Computing. Comput. Mater. Contin. 71, 1729–1750 (2021).
15. Haq, M. A. Machine Learning-based Classification of Hyperspectral Imagery. Int. J. Comput. Sci. Netw. Secur. 22, 1–10 (2022).
16. Haq, M. A. & Ahmed, A. On Interesting Correlation between Meteorological Parameters and COVID-19 Pandemic in Saudi Arabia. Int. J. Comput. Sci. Netw. Secur. 22, 1–10 (2022).
17. Haq, M. A. Planetscope Nanosatellites Image Classification Using Machine Learning. Comput. Syst. Sci. Eng. 42, 1031–1046 (2022).
18. Amit Kumar Jain, "Overview of Serverless Architecture," International Journal of Engineering Research & Technology, vol. 11, no. 09, p. 3, 2022.
19. Amit Kumar Jain, "Multi-Cloud Computing & Why do we need to Embrace it," International Journal Of Engineering Research & Technology, vol. 11, no. 09, p. 1, 2022.
20. Amit Kumar Jain, "Hybrid Cloud Computing: A Perspective," International Journal of Engineering Research & Technology, vol. 11, no. 10, p. 1, 2022.
21. Haq, M. A., Baral, P., Yaragal, S. & Pradhan, B. Bulk processing of multi-temporal modis data, statistical analyses and machine learning algorithms to understand climate variables in the indian himalayan region. Sensors 21, (2021).
22. Haq, M. A. Deep Learning Based Modeling of Groundwater Storage Change. Comput. Mater. Contin. 70, 4599–4617 (2021).
23. Haq, M. A., Jain, K. & Menon, K. P. R. Modelling of Gangotri glacier thickness and volume using an artificial neural network. Int. J. Remote Sens. 35, 6035–6042 (2014).
24. Haq, M. A., Baral, P., Yaragal, S. & Rahaman, G. Assessment of trends of land surface vegetation distribution, snow cover and temperature over entire Himachal Pradesh using MODIS datasets. Nat. Resour. Model. 33, (2020).
25. Ananda Shankar Hati, and T. K. Chatterjee, "Symmetrical component filter based online condition monitoring instrumentation system for mine winder motor" Measurement (Elsevier), vol. 82, pp. 284-300, 2016.
26. Prashant Kumar and Ananda Shankar Hati "Review on Machine Learning Algorithm Based Fault Detection in Induction Motors," Archives of Computational Methods in Engineering, vol: 28, pp: 1929-1940, 2021.
27. Kumar Prashant and Hati, Ananda Shankar "Convolutional Neural Network with batch normalization for fault detection in SCIM," IET Electric Power Application, vol: 15, issue: 1, pp. 39-50, 2021.
28. Kumar Prashant and Hati, Ananda Shankar "Deep Convolutional Neural Network based on adaptive gradient optimizer for fault detection in SCIM," ISA Transactions, vol: 111, pp: 350-359, 2021.

29. Prince, Hati Ananda Shankar, Chakrabarti Prasun, Abawajy Jemal Hussein and Ng Wee Keong "Development of Energy Efficient Drive for Ventilation System using Recurrent Neural Network," Neural Computing and Applications, Vol. 33, no. 14, pp. 8659-8668, 2021.
30. Sinha Ashish Kumar, Hati Ananda Shankar, Benbouzid Mohamed and Chakrabarti Prasun "ANN-based Pattern Recognition for Induction Motor Broken Rotor Bar Monitoring under Supply Frequency Regulation" Machines (2021), vol: 9(5).
31. Prince and Hati Ananda Shankar "A Comprehensive Review of Energy-Efficiency of Ventilation System using Artificial Intelligence" Renewable and Sustainable Energy Reviews (2021), vol: 146, 2021.
32. Kumar Prashant and Hati, Ananda Shankar "Transfer Learning Based Deep CNN Model for Multiple Faults Detection in SCIM" Neural Computing and Applications (2021).
33. Prince and Hati Ananda Shankar "Temperature and Humidity Dependent MRAS Based Speed Estimation Technique for Induction Motor used in Mine Ventilation Drive" Journal of Mining Science, 2021, Vol. 57, No. 5, pp. 842–851.
34. Kumar Prashant and Hati, Ananda Shankar "Dilated Convolutional Neural Network Based Model For Bearing Faults and Broken Rotor Bar Detection in Squirrel Cage Induction Motors" Expert Systems With Applications (2022).
35. Prince and Hati Ananda Shankar "Convolutional Neural Network-Long Short Term Memory Optimization for Accurate Prediction of Airflow in a Ventilation System" Expert Systems with Applications (2022).
36. Vatsa Aniket and Hati Ananda Shankar "Depolarization Current Prediction of Transformers OPI System Affected From Detrapped Charge Using LSTM," in IEEE Transactions on Instrumentation and Measurement, vol. 71, pp. 1-11, 2022, Art no. 2511711.
37. Gorai Rahul, Hati Ananda Shankar, and Maity Tanmoy, "A new cascaded multilevel converter topology with a reduced number of components" 3rd IEEE 2017 Conference on International conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), 21-22 September 2017 | IEEE, Chennai, India., pp. 539-543, DOI: 10.1109/ICPCSI.2017.8392351.
38. Kumar Prashant, Hati, Ananda Shankar, Sanjeevikumar Padmanaban, Leonowicz Zbigniew and Prasun Chakrabarti "Amalgamation of Transfer Learning and Deep Convolutional Neural Network for Multiple Fault Detection in SCIM" 2020 IEEE International Conference on Environment and Electrical Engineering and 2020 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe), 9th-12th June 2020, Madrid, Spain, DOI: 10.1109/EEEIC/ICPSEurope49358.2020.9160712.
39. Sinha Ashish Kumar, Kumar Prashant, Prince and Hati, Ananda Shankar, "ANN Based Fault Detection Scheme for Bearing Condition Monitoring in SRIMs using FFT, DWT and Band-pass Filters" 2020 International Conference on Power, Instrumentation, Control, and Computing (PICC) 2020 IEEE.
40. Prince Kumar and Hati, Ananda Shankar, "Sensor-less Speed Control of Ventilation System Using Extended Kalman Filter For High Performance," 2021 IEEE 8th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), 2021, pp. 1-6.

41. Kumar Prashant and Hati, Ananda Shankar "Support Vector Classifiers based broken rotor bar detection in Squirrel cage induction motor" Machines, Mechanisms and Robotics, Springer, Singapore, 429-438.

42. Hati, Ananda Shankar, and Chatterjee, T. K., "Some studies on condition monitoring techniques for online condition monitoring and fault diagnosis of mine winder motor", International Journal of Engineering Science and Technology (IJEST), vol. 4, no. 08, pp. 3785-3793, August 2012.

43. Hati, Ananda Shankar, and Chatterjee, T. K., "Axial leakage flux-based online condition monitoring instrumentation system for mine winder motor" Journal of Mines, Metals & Fuels, vol. 63, no. 5&6, pp. 132-140, May-June 2015.

44. Hati, Ananda Shankar, and Chatterjee, T. K., "Current monitoring Instrumentation system for detecting airgap eccentricity in mine winder motor", International Journal of Applied Engineering Research, vol. 10, no. 22, pp. 43000-43007, 2015.

45. Hati, Ananda Shankar, "Vibration monitoring instrumentation system for detecting airgap eccentricity in mine winder motor" Journal of Mine Metals and Fuels, vol. 64, no. 5&6, pp. 240-248, May-June 2016.

46. H. Nayak, A, Kushwaha, P.C. Behera, N.C. Shahi, K.P.S. Kushwaha, A. Kumar and K.K. Mishra, "The pink oyster mushroom, Pleurotus djamor (Agaricomycetes): A potent antioxidant and hypoglycemic agent," International Journal of Medicinal Mushrooms, vol. 23, no. 12, p. 29-36, 2021.

47. Haq, M. A., Rahaman, G., Baral, P. & Ghosh, A. Deep Learning Based Supervised Image Classification Using UAV Images for Forest Areas Classification. J. Indian Soc. Remote Sensing. 49, 601–606 (2020).

48. Baral, P. & Haq, M. A. Spatial prediction of permafrost occurrence in Sikkim Himalayas using logistic regression, random forests, support vector machines and neural networks. Geomorphology 371, 107331 (2020).

49. O. M. Abo-Seida, N. T. M. El-dabe, A. Refaie Ali and G. A. Shalaby, "Cherenkov FEL Reaction with Plasma-Filled Cylindrical Waveguide in Fractional D-Dimensional Space" IEEE Transactions on Plasma Science, vol. 49, no. 7, pp. 2070-2079, July 2021.

50. Nabil T. M. El-dabe, A. Refaie Ali, A. A. El-shekhipy, and G. A. Shalaby, "Non-Linear Heat and Mass Transfer of Second Grade Fluid Flow with Hall Currents and Thermophoresis Effects", Applied Mathematics & Information Sciences, vol. 11, no. 1, pp. 267-280, 2017.

51. N.T.M.El-Dabe, A.Refaie Ali, and A.A.El-shekhipy, "Influence of Thermophoresis on Unsteady MHD Flow of Radiation Absorbing Kuvshinski Fluid with Non-Linear Heat and Mass Transfer", Columbia International Publishing American Journal of Heat and Mass Transfer 2017.

52. Sunil Devidas Bobade, Nita S. patil , Sanjay M. Patil , Ajay Reddy Yeruva , Parth M. Pandya, Ahmed Refaie Ali, "Efficient Deterministic Approach for Coverage Hole Detection In Wireless Sensor Underground Network: Mathematical And Stimulation Model", Journal of Pharmaceutical Negative Results, vo;.13, Special Issue9, 2022.

53. Osama M. Abo-Seida , N.T.M.Eldabe , A.Refaie Ali , G. A. Shalaby, "Far-Field, Radiation Resistance and temperature of Hertzian Dipole Antenna in Lossless Medium with Momentum and Energy Flow in the Far- Zone", Journal of Advances in Physics, vol. 18 ISSN: pp. 2347-3487, 2020.

54. Osama M. Abo-Seida, N.T.M.Eldabe, M. Abu-Shady, A.Refaie Ali, "Electromagnetic non-Darcy Forchheimer flow and heat transfer over a nonlinearly stretching sheet of non-Newtonian fluid in the presence of a non-uniform heat source", Solid State Technology, vol. 63, no. 6, 2020.
55. Abo-Seida, Osama M., N. T. M. Eldabe, and Ahmed Refaie Ali. "Gamil. Ali Shalaby, " Far-Field, Radiation Resistance and temperature of Hertzian Dipole Antenna in Lossless Medium with Momentum and Energy Flow in the Far-Zone" Journal of Advances in Physics , vol. 18, pp 20-28, 2020.
56. SS Priscila, M Hemalatha, "Improving the performance of entropy ensembles of neural networks (EENNS) on classification of heart disease prediction", Int J Pure Appl Math 117 (7), 371-386, 2017.
57. S Silvia Priscila, M Hemalatha, " Diagnosisof heart disease with particle bee-neural network" Biomedical Research, Special Issue, pp. S40-S46, 2018.
58. S Silvia Priscila, M Hemalatha, " Heart Disease Prediction Using Integer-Coded Genetic Algorithm (ICGA) Based Particle Clonal Neural Network (ICGA-PCNN)", Bonfring International Journal of Industrial Engineering and Management Science 8 (2), 15-19, 2018.
59. Tadiboina, S. N., & Kumar, S. (2019). Treatment Policies For Chronic Illnesses And The Potential To Transform Health Care With Artificial Intelligence. Ilkogretim Online, 18(1), 610-619.
60. Tadiboina, S. N. (2022). The Use Of AI In Advanced Medical Imaging. Journal of Positive School Psychology, 6(11), 1939-1946.
61. Tadiboina, S. N., & Liu, W. (2022). Artificial Intelligence (AI) And Deep Learning (DL) In Medical Diagnosis Process Such As SPECT And PET. Journal of Positive School Psychology, 6(8), 10665-10673.
62. Tadiboina, S. N. (2022). The Integration Of Handheld And Smartphone-Connected Technologies Into The Doctor-Patient Relationship-AI. Journal of Positive School Psychology, 6(11), 2933-2940.
63. AbdulKader, H., ElAbd, E., & Ead, W. (2016). Protecting Online Social Networks Profiles by Hiding Sensitive Data Attributes. Procedia Computer Science, 82, 20–27.
64. Fattoh, I. E., Kamal Alsheref, F., Ead, W. M., & Youssef, A. M. (2022). Semantic sentiment classification for covid-19 tweets using universal sentence encoder. Computational Intelligence and Neuroscience, 2022, 1–8.
65. Ead, W. M., Abdel-Wahed, W. F., & Abdul-Kader, H. (2013). Adaptive Fuzzy Classification-Rule Algorithm In Detection Malicious Web Sites From Suspicious URLs. Int. Arab. J. E Technol., 3, 1–9.
66. Abdelazim, M. A., Nasr, M. M., & Ead, W. M. (2020). A survey on classification analysis for cancer genomics: Limitations and novel opportunity in the era of cancer classification and Target Therapies. Annals of Tropical Medicine and Public Health, 23(24).
67. Alsheref, F. K., Fattoh, I. E., & M.Ead, W. (2022). Automated prediction of employee attrition using ensemble model based on machine learning algorithms. Computational Intelligence and Neuroscience, 2022, 1–9.
68. J. J. Patil, Y. H. Patil, A. Ghosh, "Comprehensive and analytical review on optical fiber refractive index sensor", 2020 4th International Conference on Trends in Electronics and Informatics (ICOEI) (48184), IEEE, P. 169-175, June. 15, 2020.

69. H. Bohra, A. Ghosh, “Design and analysis of microstrip low pass and band stop filters”, International Journal of Recent Technology and Engineering (IJRTE), Vol. 8, Issue 3, P. 6944-6951, Sept. 2019.
70. Y. H. Patil, A. Ghosh, “Optical fiber humidity sensors: a review”, 2020 4th International Conference on Trends in Electronics and Informatics (ICOEI) (48184), IEEE, P. 207-213, June. 15, 2020.
71. J. J. Patil, Y. H. Patil, A. Ghosh, “Fiber Optics Refractive Index Sensor based on Intensity Modulation”, 2020 4th International Conference on Electronics, Communication and Aerospace Technology (ICECA), IEEE, P. 623-628, May. 2020.
72. H. Bohra, A. Ghosh, A. Bhaskar, A. Sharma, “A miniaturized notched band microstrip wideband filter with hybrid defected ground structure technique”, 2020 Third International Conference on Smart Systems and Inventive Technology, IEEE, P. 745-750, Aug. 2020.
73. Y. H. Patil, J. J. Patil, A. Gaikwad, A. Ghosh, “Development of Optical Fiber Test Bench for Intensity-Modulated Optical Fiber Sensors”, 2020 4th International Conference on Trends in Electronics and Informatics (ICOEI) (48184), IEEE, P. 176-180, June. 2020.
74. H. Bohra, A. Ghosh, “A Review on Different Optimization Techniques for Selecting Optimal Parameters in Microstrip Bandpass Filter Design”, International Journal of Advanced Science and Technology, Vo. 28, Issue 14, P. 379-394, Nov. 2019.
75. J. Terdale, A. Ghosh, “An intensity-modulated optical fiber sensor with agarose coating for measurement of refractive index”, International Journal of System Assurance Engineering and Management, Springer India, P. 1-7, Nov. 2022.
76. J. J. Patil, A. Ghosh, “Intensity Modulation based U shaped Plastic Optical Fiber Refractive Index Sensor” 2022 6th International Conference on Trends in Electronics and Informatics (ICOEI), IEEE, P. 18-24, Apr. 2022.
77. H. Bohra, A. Ghosh, A. Bhaskar, “Design and Analysis of Spurious Harmonics Suppressed Microstrip Ultrawide Band Filter using Modified Defected Ground Structure Techniques”, Wireless Personal Communications, Springer US, Vol. 121, Issue 1, P. 361-380, Nov. 2021.
78. H. Bohra, A. Ghosh, A. Bhaskar, A. Sharma, “A Miniaturized Ultra-Wideband Low-Pass Microstrip Filter Design using Modified Defected Ground Structure Techniques”, Invertis University, Vol. 14, Issue 1, P. 25-30, 2021.
79. H. Patidar, P. Chakrabarti, A. Ghosh, “Parallel Computing Aspects in Improved Edge Cover Based Graph Coloring Algorithm”, Indian Journal of Science and Technology, Vol. 10, P. 25, Jul. 2017.
80. A. Ghosh, P. Chakrabarti, P. Siano, “Approach towards realizing the Security Threats for Mobile IPv6 and Solution Thereof”, International Journal of Computer Applications, Foundation of Computer Science, Vol. 90, Issue 10, Jan. 2014.
81. A. Ghosh, P. Chakrabarti, D. Bhatnagar, “Performance Evaluation of Optimized Mobile IP Protocol Vis-à-vis Bit Map Indexing Method”, International Journal of Computer Applications, Foundation of Computer Science, Vol. 75, Issue: 2, Jan. 2013.
82. M. Farman, A. Akgül, M.T. Tekin, M. M. Akram, A. Aqeel , E. E. Mahmoud, I. S. Yahia, “Fractal fractional-order derivative for HIV/AIDS model with Mittag-Leffler kernel”, Alex. Eng. J, vol. 61, no. 12,pp. 10965-10980, April 2022.

83. K.S. Nisar, A. Aqeel, M. Inc, M. Farman, H. Rezazadeh, L. Akinyemi, M.M. Mannan, "Analysis of dengue transmission using fractional order scheme", Aims Math, vol. 7 no. 5, pp. 8408–8429, May 2022.
84. M.M. Akram, M. Farman, A. Akgül, M. U. Saleem, A. Ahmad, M. Partohaghigh, F. Jarad, "Analysis of HIV/AIDS model with Mittag-Leffler kernel", Aims Math, vol. 7 no. 7, pp. 13383-13401, July 2022.
85. I. Khalifa, H. Abd Al-glil, and M. M. Abbassy, "Mobile hospitalization," International Journal of Computer Applications, vol. 80, no. 13, pp. 18–23, 2013.
86. I. Khalifa, H. Abd Al-glil, and M. M. Abbassy, "Mobile hospitalization for Kidney Transplantation," International Journal of Computer Applications, vol. 92, (6), pp.25–29, 2014.
87. M. M. Abbassy and A. Abo-Alnadr, "Rule-based emotion AI in Arabic Customer Review," International Journal of Advanced Computer Science and Applications, vol. 10, no. 9, 2019.
88. M. M. Abbassy and W. M. Ead, "Intelligent Greenhouse Management System," 2020 6th International Conference on Advanced Computing and Communication Systems, 2020.
89. M. M. Abbassy, "Opinion mining for Arabic customer feedback using machine learning," Journal of Advanced Research in Dynamical and Control Systems, vol. 12, no. SP3, pp. 209–217, 2020.
90. M. M. Abbassy, "The human brain signal detection of Health Information System IN EDSAC: A novel cipher text attribute based encryption with EDSAC distributed storage access control," Journal of Advanced Research in Dynamical and Control Systems, vol. 12, no. SP7, pp. 858–868, 2020.
91. M. M. and S. Mesbah, "Effective e-government and citizens adoption in Egypt," International Journal of Computer Applications, vol. 133, no. 7, pp. 7–13, 2016.
92. M.M.Abbassy, A.A. Mohamed "Mobile Expert System to Detect Liver Disease Kind", International Journal of Computer Applications, vol. 14, no. 5, pp. 320–324, 2016.
93. R. A. Sadek, D. M. Abd-alazeem, and M. M. Abbassy, "A new energy-efficient multi-hop routing protocol for heterogeneous wireless sensor networks," International Journal of Advanced Computer Science and Applications, vol. 12, no. 11, 2021.
94. S. Derindere Köseoğlu, W. M. Ead, and M. M. Abbassy, "Basics of Financial Data Analytics," Financial Data Analytics, pp. 23–57, 2022.
95. W. Ead and M. Abbassy, "Intelligent Systems of Machine Learning Approaches for developing E-services portals," EAI Endorsed Transactions on Energy Web, p. 167292, 2018.
96. W. M. Ead and M. M. Abbassy, "A general cyber hygiene approach for financial analytical environment," Financial Data Analytics, pp. 369–384, 2022.
97. W. M. Ead and M. M. Abbassy, "IOT based on plant diseases detection and classification," 2021 7th International Conference on Advanced Computing and Communication Systems (ICACCS), 2021.
98. W. M. Ead, M. M. Abbassy, and E. El-Abd, "A general framework information loss of utility-based anonymization in Data Publishing," Turkish Journal of Computer and Mathematics Education, vol. 12, no. 5, pp. 1450–1456, 2021.
99. Hashem Shatnawi, "Computational Fluid Flow Model for the Development of an Arterial Bypass Graft", CFD Lett., vol. 14, no. 10, pp. 99-111, Oct. 2022.

100. O. Alkarabsheh, A. Jaaffar, p. Wei Fong, D. Almaaitah and Z. Alkharabsheh, "The relationship between leadership style and turnover intention of nurses in the public hospitals of Jordan," Cogent Business & Management, Vols. 9, 2022, no. Issue 1, p. Page 1 of 19, 2022.

101. F. Yassine, T. Maaitah, D. Maaitah and J. Al-Gasawneh, "Impact Of Covid-19 On The University Education System In Jordan," Journal of Southwest Jiaotong University, vol. 57, no. 1, pp. 1-15, 2022.

102. D. AL-Maaitah, T. AL-Maaitah and O. alkharabsheh, "The impact of job satisfaction on the employees turnover intention at public universities (Northern Border University)," International Journal of Advanced and Applied Sciences, vol. 8, no. 5, pp. 53-58, 2021.

103. D. Al-maaitah, R. Alias and T. Al-maaitah, "The Impact of Human Resource Management Practices and Leader Member Exchange on Job Performance: A moderating Role of Job Satisfaction in Jordanian Public Universities," Indian Journal of Science and Technology, vol. 12, no. 11, p. 5, 2019.

104. D. Maaitah, R. Allias, A. Azmin and T. Maaitah, "Leader member exchange and job performance with job satisfaction as a moderator," National Academy of Managerial Staff of Culture and Arts Herald, vol. 1, no. 1, pp. 1176-1179, 2018.

105. D. Maaitah, R. Alias and T. Maaitah, "The Impact Of Human Resource Management Practices On Job Performance In (University Of Jordan)," national academy of managerial staff of culture and arts herald, vol. 1, no. 1, pp. 1180-1183, 2018.

106. T. AL-Maaitah, A. Osman, M. Suberi, D. AL-Maaitah and M. AL-Maaitah, "Factors Influencing the Adoption of Electronic Banking in Jordan," Australian Journal of Basic and Applied Sciences, vol. 9, no. 12, pp. 104-108, 2015.

107. D. Al-Maaitah, M. Abdul Mutalib, A. Zumrah and T. Al-Maaitah, "A Conceptual Approach of Human Resource Management Practices Towards Organisation Performance: An Evidence from the Private Universities in Jordan," International Journal of Economics, Commerce and Management, vol. 3, no. 8, pp. 426-434, 2015.

108. T. AL-Maaitah, A. Osman, M. Suberi, D. AL-Maaitah and F. AL-Dhmour, "Review study on the security of electronic payment systems," International Journal of Economics, Commerce and Management, vol. 3, no. 9, pp. 821-829, 2015.

109. D. AL-maaitah, T. AL-maaitah and A. Al-shourah, "Factors Affecting Human Resource Practices In A Sample Of Diversified," International Journal Of Research Science & Management, vol. 12, no. 2, pp. 23-28, 2015.

110. A. Ahmad et al., "Energy Efficient Intrusion Detection in a heterogeneous environment of Wireless sensor networks," NeuroQuantology, vol. 20, no. 13, pp. 1493–1503, 2022.

111. A. R. Yeruva, C. S. L Vijaya Durga, G. B, K. Pant, P. Chaturvedi and A. P. Srivastava, "A Smart Healthcare Monitoring System Based on Fog Computing Architecture," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), 2022, pp. 904-909.

112. A. R. Yeruva, P. Choudhari, A. Shrivastava, D. Verma, S. Shaw and A. Rana, "Covid-19 Disease Detection using Chest X-Ray Images by Means of CNN," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), 2022, pp. 625-631.

113. A. Rana, A. Reddy, A. Shrivastava, D. Verma, M. S. Ansari and D. Singh, "Secure and Smart Healthcare System using IoT and Deep Learning Models," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), 2022, pp. 915-922.

114. K. Sridhar, Ajay Reddy Yeruva, Renjith P N, Asmita Dixit, Aatif Jamshed, and Ravi Rastogi, "Enhanced Machine learning algorithms Lightweight Ensemble Classification of Normal versus Leukemic Cel", Journal of Pharmaceutical Negative Results, Vol.13, no.SI-9, 496–505, 2022.

115. Nita S. patil, Sanjay M. Patil, Chandrashekhar M. Raut, Amol P. Pande, Ajay Reddy Yeruva, and Harish Morwani, "An Efficient Approach for Object Detection using Deep Learning", Journal of Pharmaceutical Negative Results, Vol.13, no.SI-9, pp. 563–572, 2022.

116. P. William, M. Shamim, A. R. Yeruva, D. Gangodkar, S. Vashisht and A. Choudhury, "Deep Learning based Drowsiness Detection and Monitoring using Behavioural Approach," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), 2022, pp. 592-599.

117. T. Vinoth Kumar, A. R. Yeruva, S. Kumar, D. Gangodkar, A. L N Rao and P. Chaturvedi, "A New Vehicle Tracking System with R-CNN and Random Forest Classifier for Disaster Management Platform to Improve Performance," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), 2022, pp. 797-804.

118. B. R. Rajagopal, B. Anjanadevi, M. Tahreem, S. Kumar and M. Debnath, and K. Tongkachok, "Comparative Analysis of Blockchain Technology and Artificial Intelligence and its impact on Open Issues of Automation in Workplace," 2022 2nd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 2022, pp. 288-292.

119. B.R. Rajagopal, E. Kannapiran, A.D. Gupta, M.Momin and D.S.K. Chakravarthy, "The future prospects and challenges of implementing big data in healthcare management using Structural equation model analysis," Bull. Env. Pharmacol. Life Sci., SI (1) 2022, pp. 1111-1119, 2022.

120. N.P. Krishnam, M.S. Ashraf, B.R. Rajagopal,P.Vats and D.S.K. Chakravarthy and S.M. Rafi, "Analysis Of Current Trends, Advances And Challenges Of Machine Learning (Ml) And Knowledge Extraction: From Ml To Explainable AI," Industry Qualifications The Institute of Administrative Management UK, Vol.58, pp. 54-62, May 2022.

121. A.D.Gupta, S.M. Rafi, B.R. Rajagopal, T.Milton and S.G.Hymlin, "Comparative analysis of internet of things (IoT) in supporting the health care professionals towards smart health research using correlation analysis," Bull.Env.Pharmacol. Life Sci., SI (1) 2022, pp. 701-708, 2022.

122. Roja Boina, "Assessing the Increasing Rate of Parkinson's Disease in the US and its Prevention Techniques", International Journal of Biotechnology Research and Development, 3(1), pp. 1-18, 2022.

123. Rathinam R, Brindha T, Petchiammal M, Mohamed Ibrahim A, Photo-Electrocatalytic Degradation Of Aqueous Rhodamine B Dye Using Titanium Electrodes Coated With RuO2/IrO2/TaO2, Indian Journal of Environmental protection, 41(12), pp.1365-1371, 2021.

124. Umadevi M, Rathinam R, Brindha T, Dheenadhayalan S, Pattabhi S, Application of Electro-Chemical Oxidation for the Treatment of Reactive Red 195 using Graphite Electrode, Asian Journal of Biological and Life Sciences, 2022,10 (3), 620-625.

125. Brindha T, Rathinam R, Dheenadhayalan S, Sivakumar R. Nanocomposite Coatings in Corrosion Protection Applications: An Overview . Orient J Chem 2021;37(5), Pg.1062-1067.

126. Parvathi K, Santhi T, Makeswari M, Nirmaladevi V, Rathinam R (2022) Ricinus Communis Activated Charcoal Preparation, Characterization and Application for Methyl Red Adsorptive Removal. Orient Journal of Chemistry, 38(1), 110-117.

127. A, V. V. ., T, S. ., S, S. N. ., & Rajest, D. S. S. . (2022). IoT-Based Automated Oxygen Pumping System for Acute Asthma Patients. European Journal of Life Safety and Stability (2660-9630), 19 (7), 8-34.

128. Regin, D. R., Rajest, D. S. S., T, S., G, J. A. C., & R, S. (2022). An Automated Conversation System Using Natural Language Processing (NLP) Chatbot in Python. Central Asian Journal Of Medical And Natural Sciences, 3(4), 314-336.

129. Rajest, S. S. ., Regin, R. ., T, S. ., G, J. A. C. ., & R, S. . (2022). Production of Blockchains as Well as their Implementation. Vital Annex : International Journal of Novel Research in Advanced Sciences, 1(2), 21–44.

130. T, S., Rajest, S. S., Regin, R., Christabel G, J. A., & R, S. (2022). Automation And Control Of Industrial Operations Using Android Mobile Devices Based On The Internet Of Things. Central Asian Journal of Mathematical Theory and Computer Sciences, 3(9), 1-33.

131. Jerusha Angelene Christabel G, Shynu T, S. Suman Rajest, R. Regin, & Steffi. R. (2022). The use of Internet of Things (Iot) Technology in the Context of "Smart Gardens" is Becoming Increasingly Popular. International Journal of Biological Engineering and Agriculture, 1(2), 1–13.

132. R. Steffi, G. Jerusha Angelene Christabel, T. Shynu, S. Suman Rajest, R. Regin (2022), " A Method for the Administration of the Work Performed by Employees", Journal of Advanced Research in Dynamical and Control Systems, Vol.14, no.1, pp. 7-23.

133. R. Regin, Steffi. R, Jerusha Angelene Christabel G, Shynu T, S. Suman Rajest (2022), "Internet of Things (IoT) System Using Interrelated Computing Devices in Billing System", Journal of Advanced Research in Dynamical and Control Systems, Vol.14, no.1, pp. 24-40.

134. S. S. Rajest, R. Regin, S. T, J. A. C. G, and S. R, "Improving Infrastructure and Transportation Systems Using Internet of Things Based Smart City", CAJOTAS, vol. 3, no. 9, pp. 125-141, Sep. 2022.

135. Regin, R., Rajest , S. S., T , S., G, J. A. C., & R , S. (2022). An Organization's Strategy that is Backed by the Values and Visions of its Employees' Families. Central Asian Journal of Innovations on Tourism Management and Finance, 3(9), 81-96.

136. Regin, R., Rajest, S. S., T, S., Christabel G, J. A. and R, S. (2022) "The Influence that the Advertising of Pharmaceuticals has on the Economy", Central Asian Journal Of Social Sciences And History, 3(10), pp. 1-18.

137. Regin, R., Rajest, S. S., T, S., G, J. A. C., & R, S. (2022). Pharmaceutical Supply Chain Challenges and Inventory Management. Central Asian Journal of Innovations on Tourism Management and Finance, 3(10), 143-159.

138. R, S., Regin, R., Rajest, S. S., T, S. and G, J. A. C. (2022) "Rail Project's Needed Project Management Approaches, Strategies, Methodologies, and Processes", International Journal on Economics, Finance and Sustainable Development, 4(10), pp. 109-126.

139. Regin, R., Rajest, S. S., T, S., & R, S. (2022). Impact of Internet Banking on the Efficiency of Traditional Banks. Central Asian Journal of Innovations on Tourism Management and Finance, 3(11), 85-102.

140. R, S., Rajest, S. S., Regin, R., & T, S. (2022). The Obstacles Facing Businesses that are Run by their Families as their Primary Owners. Central Asian Journal of Innovations on Tourism Management and Finance, 3(11), 145-163.

141. Rajest, S. S., Regin, R., T, S. and R, S. (2022) "Organisational Dedication, Employee Contentment on The Job, And Plans to Leave the Organization", Central Asian Journal Of Mathematical Theory And Computer Sciences, 3(12), pp. 5-19.

142. Priscila, S. S., Rajest, S. S., T, S. and G, G. (2022) "An Improvised Virtual Queue Algorithm to Manipulate the Congestion in High-Speed Network", Central Asian Journal of Medical and Natural Science, 3(6), pp. 343-360.

143. K. Suresh and E. Parimalasundar, "A Modified Multi Level Inverter with Inverted SPWM Control," in IEEE Canadian Journal of Electrical and Computer Engineering, vol. 45, no. 2, pp. 99-104, Spring 2022.

144. K. Suresh and E. Parimalasundar, "A novel dual-leg DC-DC converter for wide range DC-AC conversion," Automatika, vol. 63, no. 3, pp.572-579, 2022.

145. Parimalasundar Ezhilvannan and Suresh Krishnan, "An efficient asymmetric direct current (DC) source configured switched capacitor multi-level inverter," Journal Européen des Systèmes Automatisés, vol. 53, no. 6, pp.853-859, 2020.

146. E. Parimalasundar, S. Jayakumar, R. Ravikumar and K. Suresh, "Investigation analysis of open circuit and short circuit fault on cascaded H-bridged multilevel inverter using artificial neural network approach," International Journal of Electrical and Electronics Research (IJEER), vol. 10, no. 2, pp.320-326.

147. R. Senthilkumar, B. G. Geetha, "Asymmetric Key Blum-Goldwasser Cryptography for Cloud Services Communication Security," Journal of Internet Technology, vol. 21, no. 4 , pp. 929-939, Jul.2020.

148. Senthil kumar, R., Geetha, B.G. Signature Verification and Bloom Hashing Technique for Efficient Cloud Data Storage. Wireless Pers Commun 103, 3079–3097,2018.

149. R. Agarwal and N. Rao, "ML-based classifier for Sloan Digital Sky spectral objects," Neuroquantology, vol. 20, no. 6, pp. 8329–8358, 2022, doi: 10.14704/nq.2022.20.6.NQ22824.

150. R. Agarwal, "Edge Detection in Images Using Modified Bit-Planes Sobel Operator," 2014, pp. 203–210.

151. A. Rashi and R. Madamala, "Minimum relevant features to obtain ai explainable system for predicting breast cancer in WDBC," Int J Health Sci (Qassim), Sep. 2022.

152. R. A. A. Agarwal, "Decision Support System designed to detect yellow mosaic in Pigeon pea using Computer Vision," Design Engineering (Toronto), vol. 8, pp. 832–844, 2021.

153. R. Agarwal, S. Hariharan, M. Nagabhushana Rao, and A. Agarwal, "Weed Identification using K-Means Clustering with Color Spaces Features in Multi-Spectral Images Taken by UAV," in 2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS, Jul. 2021, pp. 7047–7050.

154. D.K. Srivastava and B. Roychoudhury, "Words are important: A textual content based identity resolution scheme across multiple online social networks," Knowledge-Based Systems, vol. 195, 105624, 2020.

155. D.K. Srivastava and B. Roychoudhury, “Understanding the Factors that Influence Adoption of Privacy Protection Features in Online Social Networks,” Journal of Global Information Technology Management, vol.24, no.3, pp. 164-182, August 2021

156. S. R. Vadyala, S. N. Betgeri, J. C. Matthews, and E. Matthews, “A review of physics-based machine learning in civil engineering.” Results in Engineering, vol. 13, p. 100316, 2022.

157. S. R. Vadyala, S. N. Betgeri, and N. P. Betgeri, “Physics-informed neural network method for solving one-dimensional advection equation using PyTorch.” Array, vol. 13, p. 100110, 2022.

158. S. R. Vadyala and E. A. Sherer, “Natural Language Processing Accurately Categorizes Indications, Findings and Pathology Reports From Multicenter Colonoscopy.” 2021.

159. S. R. Vadyala, S. N. Betgeri, E. A. Sherer, and A. Amritphale, “Prediction of the number of COVID-19 confirmed cases based on K-means-LSTM.” Array, vol. 11, p. 100085, 2021.

160. S. Pandya, T. R. Gadekallu, P. K. Reddy, W. Wang and M. Alazab, "InfusedHeart: A Novel Knowledge-Infused Learning Framework for Diagnosis of Cardiovascular Events," in IEEE Transactions on Computational Social Systems, doi: 10.1109/TCSS.2022.3151643.

161. H. Bulut and R. F. Rashid , "The Zooplankton Of Some Streams Flow Into The Zab River, (Northern Iraq)", Ecological Life Sciences, vol. 15, no. 3, pp. 94-98, Jul. 2020

162. Rashid, R. F., Çalta, M., & Başusta, A. (2018). Length-Weight Relationship of Common Carp (Cyprinus carpio L., 1758) from Taqtaq Region of Little Zab River, Northern Iraq. Turkish Journal of Science and Technology, 13(2), 69-72.

163. Pala, G., Caglar, M., Faruq, R., & Selamoglu, Z. (2021). Chlorophyta algae of Keban Dam Lake Gülüşkür region with aquaculture criteria in Elazıg, Turkey. Iranian Journal of Aquatic Animal Health, 7(1), 32-46.

164. Rashid, R. F., & Basusta, N. (2021). Evaluation and comparison of different calcified structures for the ageing of cyprinid fish leuciscus vorax (heckel, 1843) from karakaya dam lake, turkey. Fresenius environmental bulletin, 30(1), 550-559.

165. Rashid, R. (2017). Karakaya Baraj Gölünde (Malatya-Türkiye) yaşayan aspius vorax'da yaş tespiti için en güvenilir kemiksi yapının belirlenmesi/Determination of most reliable bony structure for ageing of aspius vorax inhabiting Karakaya Dam Lake (Malatya-Turkey).

166. Parvathi K, Santhi T, Makeswari M, Nirmaladevi V, Rathinam R. Ricinus Communis Activated Charcoal Preparation, Characterization and Application for Methyl Red Adsorptive Removal. Orient J Chem 2022;38(1), Pg. 110-117.