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It gives me pleasure to present the editorial preface of the International Journal of Machine Learning and Networked Collaborative Engineering (IJMLNCE) Volume 04 No 02 (2020). This issue comprises five manuscripts contributed by authors.

The first paper of this issue titles, "*Edge detection of Friction Stir Welded Joints by using Fourier Transformation*," is contributed by Akshansh Mishra et. Al. In the manuscript, the authors have implemented two machine learning-based image processing techniques. They stated that visual inspection had played a vital role in the beginning era of science. Nowadays, image processing is finding application for defects analysis of the manufactured parts in many industrial processes. We have implemented two machine learning-based image processing techniques in recent work, i.e., Fourier Transformation operator and Laplacian operator for the surface defects detection in Friction Stir Welded joints. In conclusion, The quality of the weld surface in the Friction Stir Welding process depends on the input parameters such as Tool Rotational Speed (rpm), Tool Traverse Speed (mm/min), and an Axial Force (kN).

The second paper, titled "*Utilize Machine Learning Methods to Detect Plaintext Passwords*," is authored by Nada Alnoaimi et. Al. In this article, information security explores, where the author states that every company is a target today, no matter its type. Hackers and cybercriminals are after data which they can monetize in many ways. Being proactive and have a defensive and protective plan in place, such as evaluating and assessing IT security, is an excellent recipe for avoiding data breaches and, consequently, business disasters. Why not utilizing a machine learning platform could be trained to search text in a computer resource, detect a string of plaintext characters, and analyze the string of characters to predict or detect a plaintext password on a computer resource asset. The machine will be able to catch a plaintext password in a character string by analyzing plaintext character strings for typical password complexity, such as, for example, including at least one uppercase letter, lowercase letter, number, unique character, and text length (for example, minimum of eight characters). It will also predict a level of certainty that a character string includes a password and output a confidence score based on the expected level of certainty. Finally, it will categorize the confidence score in any number of prediction certainty levels, including, for example, three groups – high, medium, or low.

S Nagaprasad et al. contributed the third article for this issue titled "*Heart Disease Prediction Propagation approach*." Data mining methods are used to test complex data,

and regression processing based on input data sets is used to estimate results. A variety of prediction analysis methods have been implemented in recent years. The clustering method k-means and SVM (support vector machine) are a statistical, computational technique for clustering and defining primary data to detect cardiac disorders. In this study, the Back Propagation Method is used in tandem with the k-means clustering algorithm to cluster knowledge for improved prediction research performance. The implemented algorithm's output is found in the cardiac disorder data sample collected from the UCI depositor. Within this sample, there are 66 attributes.Nonetheless, a subgroup of 14 qualities is needed for every study. The Cleveland platform is utilized in particular for machine-learning investigators. The research designed correlates with the current techniques, precision, error identification, and deployment time (using the numerical mean).

The Fourth article, title "*Discovering Trending Topics from the Tweets By Odia News Media During Covid-19,*" was contributed by Swarupananda Bissoyi et. Al. This paper explores the Covid-19 pandemic's onset, and the lockdown imposed because it has significantly fueled news consumption. News portals, including the ones in Odia language, are actively feeding news related to Covid-19 to their consumers via their websites and Twitter handles. The news items didn't restrict to Covid-19 alone; they also touched various domains of life like education, healthcare, administration, politics, movies, etc. Discovery of the news trends provides a bird's eye view of the issues and topics popular in the online community. This could be of interest to advertisers, marketers, researchers, sociologists, and policymakers. This paper applies Topic Modeling to discover the trends from the tweets made by the Odia news media from 20th March 2020 to 31st August 2020, the period which saw the emergence of both lockdowns and unlocks in India. We found that during this period, the Odia news media didn't restrict themselves to report news surrounding Covid-19; rather they reported other happenings as well.

In the fifth and last article of this issue, titled "*Designing Hand-Held Vibration Measuring Device for Industrial Machines*," is contributed by Thi Dieu Linh Nguyen et al., In this manuscript, the authors discuss that Evaluating the quality of industrial machines, the vibration meter is used to measure the actual vibration of the machine. The two most important parameters describing machine vibration, amplitude, and frequency, are the basis for determining the cause of vibrations. Spectral analysis of the vibration signal will give information about the vibration level and choose which part of the machine the vibration signal is caused. This paper presents the manufacturing of vibration measuring devices with simple structure, compact size, and high accuracy at a reasonable price. The spectral analysis method of vibrating signals and real-time spectrum display of the measured vibration signals

I am sure that these five papers included in the International Journal of Machine Learning and Networked Collaborative Engineering (IJMLNCE) Volume 04 No 02 (2020) will be useful to the research community. At this end, I am thankful to the Editorial board member for their timely support in the review. I am looking forward to receiving your unpublished research work for Volume 05 No 01 (2021).

Editor-in-Chief's

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