

Editorial

Special issue: International Conference on Data Analytics and Computational Techniques

Hemant Kumar Nashine^{a,*}, Reena Jain^b, Neha Choubey^b and Mayank Sharma^b

^a*Vellore Institute of Technology, Vellore, TN, India*

^b*VIT Bhopal University, Bhopal, MP, India*

Being a combination of several techniques and processing methods, the Data Analytics technology is emerged as an effective tool for the enterprises to obtain relevant results for strategic management and implementation. In the present circumstances the digital world is extensively using the advanced data analytic techniques for extracting knowledge or useful insights from the various kind of data such as Internet of Things (IoT) data, health data, business data, security data, and many more, which can be used for smart decision-making in various application domains. In the areas of data science, advanced analytical methods including machine learning modelling can provide actionable insights or deeper knowledge about data, which makes the computing process automatic and smart.

Inspired by the mentioned facts, an international conference on “Data Analytics and Computational Techniques” had been organized and hosted in VIT Bhopal University in fully virtual mode during December 2021.

The seven full length papers for this special issue were selected among all the accepted papers in the conference by the MASA Guest Editors Hemant Kumar Nashine, Reena Jain, Neha Choubey and Mayank Sharma, based on the relevance to the journal and the reviews papers. The papers went through the normal journal-style review process and they appear in the present form after implementing the valuable suggestions by the Co-Editor-in-Chief Stan Lipovetsky. The papers are pertaining to the various data analytics techniques applied to the diverse statistic areas. We appreciate the willingness of the authors to help in organizing this special issue.

S.S. Aravinth, S. Srithar, M. Senthilkumar and J. Senthilkumar contribute a paper titled “Regression Analysis Based Decision Support System With Relationship Extraction”. The Authors used the regression modelling to analyse and study the relationship between the Years of Experience and the salary of employees in phased approach.

M. Ashraf Bhat and G. Sankara Raju Kosuru present a paper titled “On Continuity of Distribution Function and Decreasing Rearrangement” which investigates the necessary and sufficient conditions under which the distribution functions and their decreasing rearrangement are continuous.

Jagriti Das contributes a paper titled “Computation of the Probability of Ultimate Ruin and some other Actuarial quantities under the Classical Risk Model via Fast Fourier Transform”. The Author obtained the Probability of ultimate ruin under the classical risk model as a solution of an integro-differential equation involving convolutions and have used Fast Fourier Transform (FFT) to obtain the approximate values of the probability of ultimate ruin.

Henry Penikas contributes a paper titled “PD-LGD Correlation for the Banking Lending Segment: Empirical Evidence from Russia”. In this paper the Author improved the existing Russian banks PD model, created a respective novel LGD model and studied the PD-LGD correlation (PLC) for the Russian banks.

*Corresponding author: Hemant Kumar Nashine, Vellore Institute of Technology, Vellore, TN, India. E-mail: hemant.nashine@vit.ac.in.

Yury Y. Festa and Ivan A. Vorobyev present a paper titled “A Hybrid Machine Learning Framework for E-commerce Fraud Detection”. In this paper they presented a framework of models based on various approaches of artificial intelligence to recognize payment behaviour of fraudster. They also discussed the interrelation between the anti-fraud system indicators and banks operational risks.

Shromona Neogi, A. Prince Jason and Angeline Selvakumar present a paper titled “A Study on Work Life Balance in the era of Work from Home with reference to understanding the change in perceived Job Satisfaction through Statistical Analysis”. They performed a study to understand the perseverance of job satisfaction and work life balance in and before the change. The statistical tools like Multiple Regression Analysis along with Pearson correlation and z-test has been used to understand the stability and the effects of the different attributes on the studied subject.

Sayantana Mukherjee, A. Prince Jason and Angeline Selvakumar present a paper titled “Empirical Study on Understanding Online Buying Behaviour through Machine Learning Algorithms”. The authors studied about the online engagement of the teenagers along with the behavioural transformation in buying the stuffs online. The statistical tools like K-S test, MLR test; Pearson correlation have been used to justify the study along with the usage of machine learning algorithms to construct a predictive model of behaviour and its efficiency.

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