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3.3.2   Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher

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KRISTU JYOTI COLLEGE OF MANAGEMENT & TECHNOLOGY
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OF PRESENTATION

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Johnsymol Joy

OF SAINTGITS COLLEGE OF APPLIED SCIENCES, PATHAMUTTOM
FOR SUCCESSFULLY PRESENTING A PAPER AT THE FIRST INTERNATIONAL
CONFERENCE ON ADVANCE MODERN COMPUTING TRENDS AND TECHNOLOGY
(ICAMCTT 2021) ON 30TH & 31ST OF JULY 2021

Paper Title : Analysing the Impact of Online Classes on Student's Health using
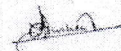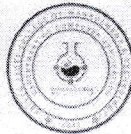Machine Learning Techniques

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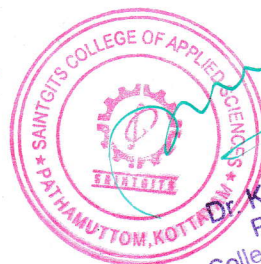Principal

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Principal
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam 686 532, Kerala

Analysing the Impact of Online Classes on Student's Health using Machine Learning Techniques

Alen James
Department of Computer Applications
Mahatma Gandhi University, Kottayam
alenj.bca1922@saintgits.org

Harithamol K. H.
Department of Computer Applications
Mahatma Gandhi University, Kottayam
harithamol.bca1922@saintgits.org

Vasudevan Nampoothiri
Department of Computer Applications
Mahatma Gandhi University, Kottayam
vasudevan.bca1922@saintgits.org
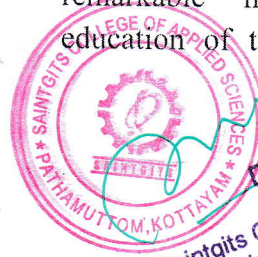
Asst.Prof. Johnsymol Joy
Department of Computer Applications
Mahatma Gandhi University, Kottayam
johnsymol.joy@saintgits.org

Abstract—The onset of Covid 19 had an adverse effect in all areas of one's life and thereby made us adapt to new and unfamiliar ways to carry on with our daily life. Utilization of online mode of interaction became a necessity for most of us. One such shift was the transition from regular class to online class. The educational sector was one of the quickest to adapt to online mode of operation, using apps like google meet, zoom, microsoft teams,etc to conduct online interactive classes. In this paper we try to analyse the health concerning problems associated with this new mode of education. For this purpose we use machine learning to categorize the data collected and use it to analyse the student's health and check whether their health is more negatively affected on online classes when compared to offline classes. Machine learning classification techniques such as Naive Bayes, J48, Random Forest, Decision Table etc to conduct the analysis.

I. INTRODUCTION

Education is one of the most prominent as well as an important sector of a country. It impacts the future of the youth as well as the future of the whole country itself. In 2020 marked the arrival of a world-wide pandemic due to a deadly virus known as COVID-19 and most of the organizations and institutions had to be shut to suppress the spread of the virus. This pandemic has disrupted the traditional way of learning and studying and forced the education sector to adopt a new means of teaching so that the students can stay home and study [6]. This method of Online Learning was a remarkable measure to continue the education of the students, and the whole

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F-measure is used to test the accuracy of the algorithm, it combines precision and recall into a single entity. It is also known as F1-Score or F-Score. Its formula is the harmonic mean of precision and recall.

IV. CONCLUSION

Through this paper we try to analyse the effects of online classes on student's health with the help of real-time data-set. Online classes place a huge amount of strain and stress on students, and long and constant viewing of screens of devices leads to headaches. Using Weka tool and different machine learning algorithms were used to process the data collected from the google forms. Through testing of the data, the random forest was found to be the most accurate algorithm when compared to other algorithms and had an accuracy rate over 96 percent. The recall precision and the f-measure of random forest and all the other algorithms are shown in the graph. The data used was real time data and a total of 207 responses were recorded, this data had a small sample size and hence could not represent the entire student body. From the paper we can see that random forest is the best technique which can be used to analyse the students overall health during online classes.

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