

## Activity Report (news bulletin) of IT Dept. for July 2023

### 1. Expert Lecture/Seminar/Courses Organized by Department during July2023:

Dept. of Information Technology had organized a workshop on “Startup Ecosystems” by Mr. Harsh Deodhar, Serial Entrepreneur, Venture Partner, Consultant and Faculty mentor on 17<sup>th</sup> July 2023,.

### 2. Papers Presented/Published in the Journal by Staff during July2023:

Title of Paper: Intrusion Detection in the Digital Age: A Hybrid Data Optimization Perspective

Name of Journal: International Journal of Intelligent Systems And Applications In Engineering (IJISAE)

Volume and Issue : Volume 11, No 7 July 2023

ISSN No.: 2147-6799

Names of Authors: Prof. Pragati V. Pandit

Abstract: - The ever-growing use of technology has resulted in a considerable rise in the total number of cyber threats and security breaches. Intrusion detection systems (IDSs) have become an crucial tool in combating these threats by detecting and preventing unauthorized access to computer systems and networks. In this research paper, we present a hybrid data optimization perspective on intrusion detection in the digital age. The importance of IDS cannot be overstated in the current digital landscape. With the increasing sophistication of cyber threats, traditional intrusion detection methods may prove insufficient. A hybrid approach that combines the strengths of multiple algorithms can lead to improved accuracy and reduced false alarms. In our research, we use a hybrid feature selection approach that combines genetic algorithms (GA) and random forest (RF) to choose the most important characteristics for the purpose of intrusion detection. The proposed hybrid approach to detecting intrusions has been shown to significantly improve the system's accuracy compared to the use of both RF and GA alone. We performed a comprehensive evaluation of the three algorithms, namely the SVM-RF, the support vector machine (SVM) and the random forest. Our research provides a valuable contribution to the field of intrusion detection by presenting a hybrid data optimization perspective that can significantly improve the accuracy of intrusion detection systems. This work can be used as a reference for future research in the area and can be applied in real-world intrusion detection systems to provide better protection against cyber threats.

Index Terms - Intrusion detection system, cyber-attack, threat, security, Machine learning

### 3. Papers Presented by Students during July2023: **NIL**

### 4. Industrial Training/Workshop done by Staff during July 2023: **NIL**

### 5. Industrial Visit organized by department for student during July 2023: **NIL**

### 6. Training and Placement Cell during July 2023:

Sr. No.	Name of Students Selected	Name of the Company
1	Gayatri Vinayak Chandole	FinIQ Consulting India Pvt Ltd,Nashik
2	Jigyashu Singh	
3	Sahil Ravindra Walzade	
4	Sanika Bhamare	
5	Saurabhi Gujarathi	

### 7. Books Purchased in Central Library during July 2023: **NIL**

### 8. Forthcoming event in the month September and October 2023:-

### 9. Achievements:

Prof. Pragati V. Pandit registered copyright for the topic “Machine Learning Based Random Forest Approach for Malaren Detection”.