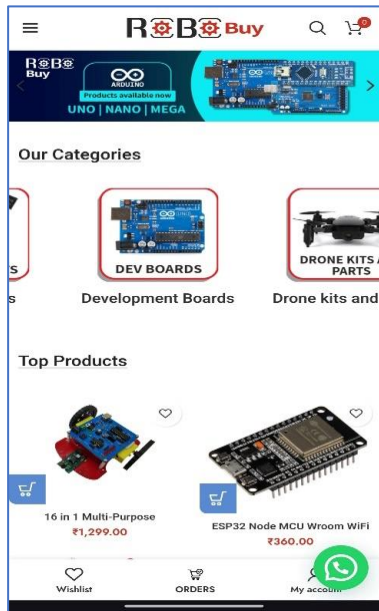


## Startup launched RoboBuy



Ishaan Singh Negi (Reg. no. 229302382) successfully launched a startup "RoboBuy". The start up is a cutting-edge online marketplace dedicated to robotics and electronic products and kits. Their platform offers a wide range of products designed to inspire and support creativity in the world of technology.

This achievement marks a significant milestone in their mission to provide enthusiasts, educators, and professionals with access to high-quality components and innovative tools. You can check out the link: <https://robobuy.in/>

## Summer School Southern Federal University, Taganrog, Russia

## Participation in OJAS 2024 12-14 April, 2024

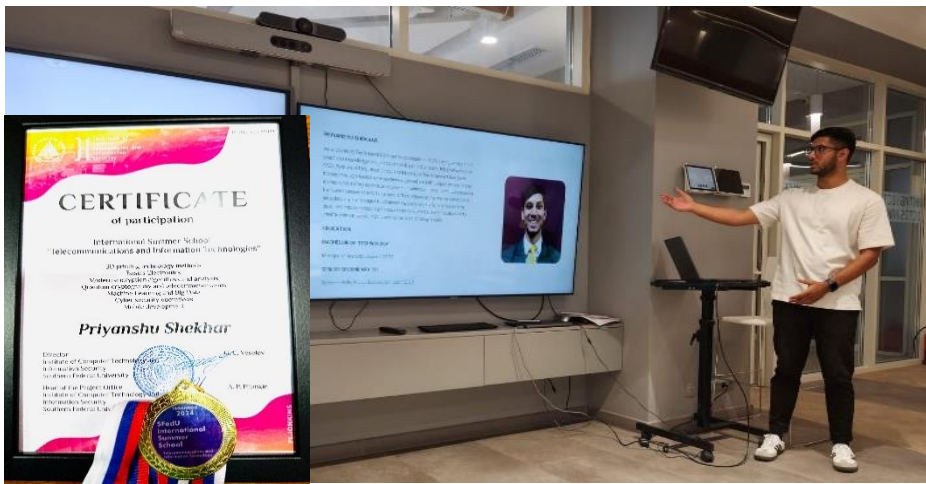
Dev Taneja (Reg. No. 229303259) and his team participated in Basketball competition in OJAS 2024 from April 12-14, 2024, at UPES, Dehradun.



## Won First Position at Autobots 2.0



Vansh Kumar Singh (Reg. no. 229311079) and his teammate won the First position at Autobots2.0 hosted by ACM, MUJ, on 8 April 2024. The team developed an automatic maze traversing auto boat that raced flawlessly, penalty free and fasted in the competition. The team explored diverse techniques and algorithms to reach the winning formula.



Priyanshu Shekhar (Reg. No. 219311096) completed an International Summer School on Telecommunications and Information Technologies organized by Southern Federal University in collaboration with MUJ at Taganrog, Russia in the month of June.

### Desk of Director, SCIS



Dear students and colleagues, our pursuit of knowledge and innovation enriches the community and propels us forward. Being a part of Computing and Intelligent Systems, let's continue to collaborate, inspire, and drive positive change together.

Best Wishes

Prof. V. S. Dhaka  
(Director), School of  
Computing and Intelligent  
Systems

### Desk of HoD, IoT & IS



Dear Friends, remember that every challenge is an opportunity to grow. Keep pushing your boundaries and embracing new knowledge. Your dedication is the key to unlocking endless possibilities. Wishing you continued success in all domains.

Dr. Geeta Rani (HoD),  
IoT and Intelligent Systems

Editor:  
Dr. Hemlata Goyal (Faculty)  
Mr. Ritwik Garg  
(Student)

## Workshop on " Effective Strategies of Research Article Writing and Publishing" April 09, 2024



The School of Computing and Intelligent Systems, Manipal University Jaipur in collaboration with MUJ-TEC organized a one-day workshop on " Effective Strategies of Research Article Writing and Publishing" on April 09, 2024. The aim of the workshop is to help the participants to structure the scientific content in a rightful manner and discussed new tools of scientific publishing



The sessions were focused on providing guidelines to the participants regarding "How to prepare a manuscript", "How to select a Journal for your work", "Submission Ethics" etc. With the help of hands-on practices as well as query sessions, participants were able to understand different ways to write the effective research articles.

## STC on "Evolving Artificial Intelligence" 28th May - 1st June 2024



The short-term course on "Evolving Artificial Intelligence" was a collaborative effort of the Department of Computer Science and Engineering, NIT Delhi, and the Department of IoT & Intelligent Systems, Manipal University Jaipur. The STC was conducted from 28th May to 1st June 2024. This course aimed to provide a comprehensive understanding of the dynamic field of Artificial Intelligence (AI). Over the course of five days,

approximately 80 registered participants, along with committee members and subject experts, had the opportunity to engage in 10 expert sessions. These sessions were conducted by highly experienced experts, Prof. Seema Bawa, Professor, Thapar Institute of Engineering & Technology, Patiala, Dr. Rajneesh Rani, Associate Professor, NIT

Jalandhar, Dr. Amandeep Kaur, Assistant Professor, IIIT Gwalior, Prof. Lalit Garg, Associate Professor, University of Malta, Malta, Prof. T. V. Vijay Kumar, Professor, JNU Delhi, Dr. Nonita Sharma, Associate Professor & Manager (International Affairs), IGDTUW New Delhi, Mr. Vidyadhar Aski, Head, Emerging Technology CoE @Mahindra group, AI Integration Specialist, Digital Transformation Enabler, Corporate R&D, Dr. Eugenio Vocaturo, University of Calabria, Italy, Dr. Ester Zumpano, Associate Professor, University of Calabria, Italy, Prof. Ram Bilas Pachori, Professor, IIT Indore from both industry and academia, offering a diverse perspective on the latest advancements and applications of AI. The topics covered during the course were wide-ranging and included machine learning, deep learning, generative AI, applications of machine learning, AI in healthcare, disaster management, digital twin, and industry automation. This event not only facilitated knowledge sharing but also fostered discussions on the future directions on AI, enabling participants to stay abreast of current trends and innovations in this rapidly evolving field.



## Expert Lecture on Unlock Your Path to Higher Education 22, April 2024

Prof Lalit Garg, University of Malta, was invited to deliver an expert lecture on "Unlock Your Path to Higher Education". This event is designed to provide attendees with valuable insights and guidance on navigating the complexities of higher education opportunities.



**MANIPAL UNIVERSITY JAIPUR**  
(University under Section 2(f) of the UGC Act)

**ICICV** Springer

Fourth International Conference on Innovations in Computational Intelligence and Computer Vision  
**ICICV-2024**  
April 10-11, 2024

Organized by:  
School of Computer and Communication Engineering, Faculty of Engineering, Manipal University Jaipur, India

**Scopus**

**PUBLICATION**  
Lecture Notes in Networks and Systems (ISSN: 2367-3370) Indexed by SCOPUS, DBLP, INSPEC, SCImago, etc.

**PAPER SUBMISSION**  
<https://cm13.research.microsoft.com/ICICV2024>

**IMPORTANT DEADLINES**  
Paper Submission: Jan. 15, 2024  
Notification of Acceptance: Jan. 31, 2024  
Camera ready submission: Feb. 15, 2024  
Registration: Feb. 29, 2024

**REGISTRATION FEE**

| Category              | Indian (INR) | International (USD) |
|-----------------------|--------------|---------------------|
| Students/ Researchers | 10000        | \$200               |
| Academicians          | 12000        | \$250               |
| Industry participants | 14000        | \$300               |
| Attendee only         | 2500         | \$100               |

Registration fee is inclusive of 18% GST

**ORGANIZING PARTNERS**  
CNR NANOTEC, UNIVERSITÀ DELLA CALABRIA, L'Università ta' Malta




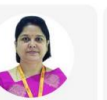






Manipal University Jaipur  
Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan (INDIA). PIN - 303007  
<https://jaipur.manipal.edu/>

## 4<sup>th</sup> International Conference on Innovations in Computational Intelligence and Computer Vision (ICICV-2024) April 10-11, 2024

The School of Computing and Intelligent Systems, Manipal University Jaipur organized the 4<sup>th</sup> International Conference on “Innovations in Computational Intelligence and Computer Vision” (ICICV-2024) during April 10-11, 2024 in hybrid mode. Partner Institutions for ICICV-2024 were • CNR Nanotec - Institute of nanotechnology, Italy • DIMES, University of Calabria, Italy, and • University of Malta, Malta.



**Organizing Committee:**

|   |  |   |  |  |
|---|--|---|--|--|
| <br>Chief Patron<br>Sh. S. Vaitheeswaran<br>Chairperson, MUJ               | <br>Patron<br>Prof. G. K. Prabhu<br>President, MUJ          | <br>Co-Patron<br>Cmde (Dr) Jawahar M<br>Jangir<br>Pro-President, MUJ | <br>Co-Patron<br>Prof. Nitu Bhatnagar<br>Registrar, MUJ             | <br>General Chair<br>Prof. Arun Shanbhag<br>Dean - FoE, MUJ     |
| <br>Program Chair<br>Prof. Vijaypal Singh<br>Dhaka<br>Director - SCES, MUJ | <br>Program Co-Chair<br>Prof. Sunil Kumar<br>HoD - CCE, MUJ | <br>Program Co-Chair<br>Dr. Geeta Rani<br>HoD - IOT & IS, MUJ        | <br>Convener<br>Dr. Deepak Sinwar<br>Associate Prof., IOT & IS, MUJ | <br>Convener<br>Dr. Satyabrata Roy<br>Associate Prof., CSE, MUJ |

The conference received a total of 495 research paper submissions from different countries including Hong Kong, USA, Phillipines, Ethiopia, UAE, Indonesia, Sri Lanka, Oman, France, Spain, Ecuador, Bangladesh, Iraq, Zambia, Vietnam, Italy, and India. After careful examination by technical program committee of ICICV 2024 followed by single blinded review process, 80 qualitative submissions based on the thrust areas of the conference were selected (with an acceptance rate of 16.16%) for oral presentations.

An Image Classification Example

- ✓ Data set: F1 World Championship 2023
- ✓ Classification Task: To detect if a Ferrari appears in a photo.



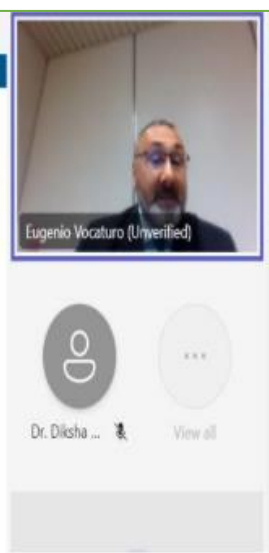
Optimization

02

Multiple Instance Learning

Dr. Disha ... View all

Positive bag Negative bag

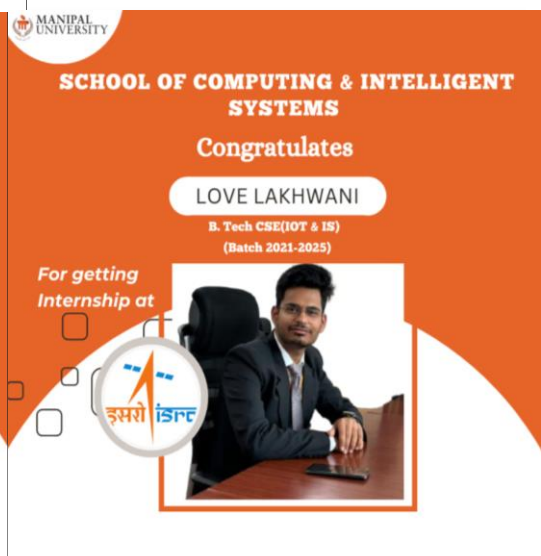
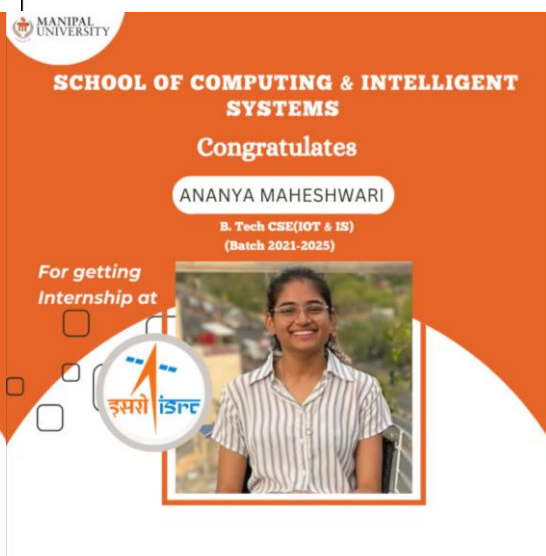
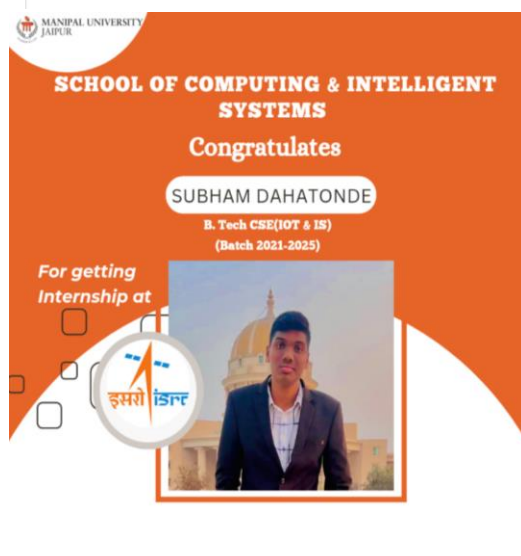
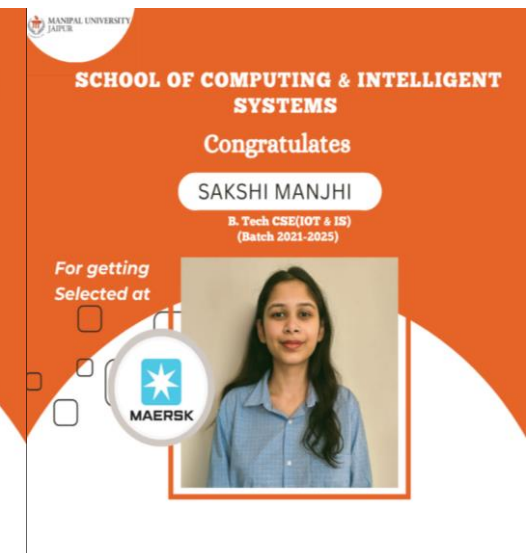
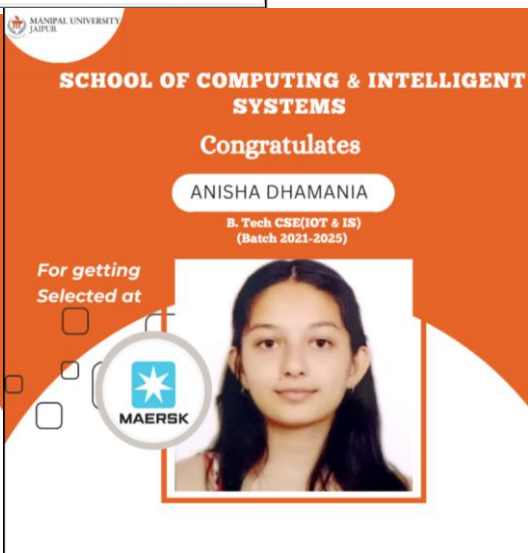
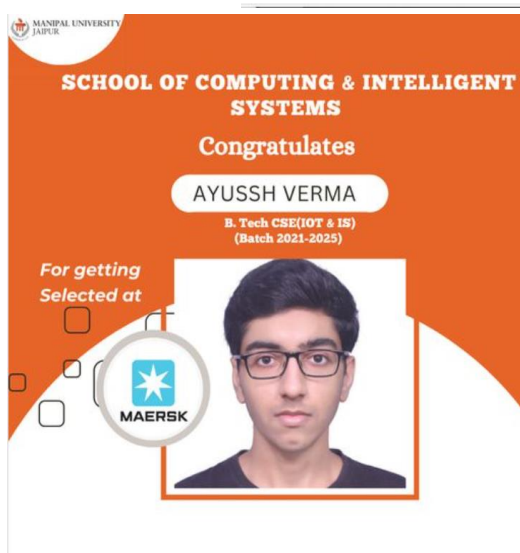
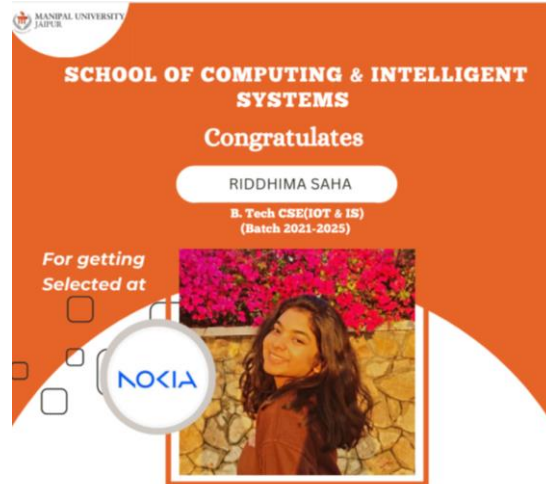


## Expert Lecture on Research Trends in Artificial Intelligence, April 11, 2024

Prof Eugenio Vocaturo from the University of Calabria, Italy, and CNR NanoTec- Institute of Nanotechnology, Italy, has delivered an expert lecture (online mode) on Research trends in Artificial Intelligence, dated 11<sup>th</sup> April 2024 at Manipal University Jaipur. This lecture aims to explore the cutting-edge advancements and the evolving landscape of AI research, including breakthroughs in

machine learning, neural networks, and AI applications across various industries. Students, faculties, and researchers gained insights into the innovative methodologies and emerging technologies driving AI forward, as well as the ethical considerations and future implications of AI developments along with staying at the forefront of AI knowledge and leveraging these insights for academic, personal, or professional growth.

## Internships at NOKIA, PHILIPS, MAERSK, ISRO...



Jeevant Singh (Reg.No 229311042)  
Summer Programme in IIM Udaipur

## Top Researcher of The Month Award

| April 2024  | May 2024   | June 2024  |
|---|--|--|
| <ul style="list-style-type: none"><li>• Dr G.L. Saini</li><li>• Dr Geeta Rani</li><li>• Dr Vijaypal Singh Dhaka</li></ul> | <ul style="list-style-type: none"><li>• Dr G.L. Saini</li><li>• Dr Vijaypal Singh Dhaka,</li><li>Dr Gyanendra Kumar</li><li>• Dr Hemlata Goyal</li></ul> | <ul style="list-style-type: none"><li>• Dr Gyanendra Kumar</li><li>• Dr G.L. Saini &amp; Dr Rohit Mittal</li><li>• Rajesh Kumar, Dr. Deepak Sinwar</li></ul> |

### JOURNAL PUBLICATIONS

Kumar, R., Sinwar, D., & Singh, V. (2024). Analysis of QoS aware traffic template in n78 band using proportional fair scheduling in 5G NR. *Telecommunication Systems*, 1-16, <https://link.springer.com/article/10.1007/s11235-024-01169-8>, June 2024.

Kumar, R., Sinwar, D., & Singh, V. (2024). Experimental evaluation of MU-MIMO in TDD environment for 5G NR using exploiting channel reciprocity. *International Journal of Information Technology*, 1-16, <https://link.springer.com/article/10.1007/s41870-024-01946-3>, June 2024.

Tripti Dua, Neha Singh, Renu Kumawat, "Novel Approaches to High-Speed Energy Efficient 2:1 Multiplexer Design", *Journal of Xidian University*, Vol 18, p 311-326, July 2024, <https://doi.org/10.5281/Zendo.12680965> (Scopus Q3)

Joon, R., Tomar, P., Kumar, G., Balusamy, B., & Nayyar, A. (2024). Unequal Clustering Energy Hole Avoidance (UCEHA) algorithm in Cognitive Radio Wireless Sensor Networks (CRWSNs). *Wireless Networks*, 1-23.

Singh, S. P., Kumar, N., Kumar, G., Balusamy, B., Bashir, A. K., & Al-Otaibi, Y. D. (2024). A Hybrid Multi-Objective Optimisation for 6G-Enabled Internet of Things (IoT). *IEEE Transactions on Consumer Electronics*.

Pragya, Kumar, B., & Kumar, G. (2024). Optimized Duplicate Address Detection for the Prevention of Denial-of-Service Attacks in IPv6 Network. *IETE Journal of Research*, 1-26.

Kumar, G., & Pragya. (2024). IPv6 addressing with hidden duplicate address detection to mitigate denial of service attacks in the internet of drone. *Concurrency and Computation: Practice and Experience*, e8131.

Singh, Kiran Deep , Singh, Prabh Deep, Saini, G. L. & Panwar, Deepak (2024) Privacy-preserving cryptographic solutions for medical image protection : The secure force algorithm and intelligent encryption systems, *Journal of Discrete Mathematical Sciences and Cryptography*, 27:2-A, 537-546, DOI: 10.47974/JDMSC-1926

Singh, Kiran Deep , Singh, Prabh Deep , Saini, G. L. , Panwar, Deepak & Goyal, Dinesh (2024) Cryptographic security for IoT : Leveraging Feistel-permutation network for enhanced encryption, *Journal of Discrete Mathematical Sciences and Cryptography*, 27:2-B, 559-568, DOI: 10.47974/JDMSC-1890

Mittal, Rohit , Pathak, Vibhakar , Saini, G. L. & Raja, Linesh(2024) A novel method for vehicular network system using static QR code for bituminous roads, *Journal of Discrete Mathematical Sciences and Cryptography*, 27:4, 1271-1281, DOI: 10.47974/JDMSC-1981

### CONFERENCE PUBLICATIONS

Khandelwal, J., Sharma, V.K. (2024). Reversible Image Steganography Using Deep Learning Method: A Review. In: Bhattacharyya, S., Banerjee, J.S., Köppen, M. (eds) *Human-Centric Smart Computing. ICHCSC 2023. Smart Innovation, Systems and Technologies*, vol 376. Springer, Singapore

Paper presented on "Intelligent Basketball Sports Management System Computing Individual Player's Performance" in National Symposium on Multidisciplinary Research Trends For Sustainable World (MRTSW-s4) held from 22 to 23 May 2024 and organized by Chitkara University Punjab

Utsav, O., Saini, G.L., Panwar, D. (2024). Impact of Machine Learning in Cybersecurity: A Critical Review with Insights on the Internet of Things. In: Das, S., Saha, S., Coello, C.A.C., Rathore, H., Bansal, J.C. (eds) *Advances in Data-Driven Computing and Intelligent Systems. ADCIS 2023. Lecture Notes in Networks and Systems*, vol 890. Springer, Singapore. [https://doi.org/10.1007/978-981-99-9531-8\\_29](https://doi.org/10.1007/978-981-99-9531-8_29)

Kesarwani, T., Mittal, R., Panwar, D., Saini, G.L., Kumar, S. (2024). Facial Recognition Model Using Custom Designed Deep Learning Architecture. In: Sharma, H., Shrivastava, V., Tripathi, A.K., Wang, L. (eds) *Communication and Intelligent Systems. ICCIS 2023. Lecture Notes in Networks and Systems*, vol 969. Springer, Singapore. [https://doi.org/10.1007/978-981-97-2082-8\\_32](https://doi.org/10.1007/978-981-97-2082-8_32)

Kiran Deep Singh, G L Saini, and Prabh Deep Singh. 2024. Leveraging Transfer Learning for Improved Diagnostics in Dermatology. In *Proceedings of the 5th International Conference on Information Management & Machine Intelligence (ICIMMI '23)*. Association for Computing Machinery, New York, NY, USA, Article 160, 1-5. <https://doi.org/10.1145/3647444.3652465>

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### PATENT PUBLICATIONS

1. Rank-Based Multi-Path Transmission Control Protocol (Patent No.-202411039616)
2. Enhanced IPv6 Duplicate Address Detection to Combat DoS Attacks (Patent No.-202411048150)