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**COLLEGE OF ENGINEERING**

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### Patent Details for Verification\_NIRF2026

Sl. No.	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Assignee/s Name (Institute Affiliation/s at time of Application)	Page No.
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#### Published Patent for 2023- 2024

1	202321039765A	Published	Mr. Swanand Kirpekar, Dr. Padmayya Naik	INNOVATIVE TEMPERATURE CONTROL SYSTEM INSIDE A VEHICLE	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">1</a>
2	202321058290A	Published	Dr. Mayura Vishal Shelke, Swanand Kirpekar, Ms. Bhagyashree Dagadu Lambture, Mrs. Sayali Aditya Belhe, Radha Shirbhate, Richa Agnihotri, Vandana Vinayak Navale, Varsha Rahul Dange	CYBER SECURITY RISK ASSESSMENT AND MANAGEMENT SYSTEM USING AI AND ML FOR ENTERPRISE NETWORK	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">2</a>
3	404302-001	Published	Mr. Yogesh Pawar	Pharmaceutical Deblistering Machine	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">3</a>
4	398539-001	Published	Dr. Bharati P. Vasgi, Dr. Kalpana S Thakre, Dr. Girija Chiddarwar, Dr. Smita Chaudhari	Centralized Enterprise Resource Planning Device	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">4</a>
5	202341052710	Published	Dr. Neha Jain	Automated bug detection and repair in software using deep learning	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">5</a>
6	390495-001	Published	Dr. Neha Jain	Augmented reality feedbcak analysis device	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">6</a>

7	202023107184	Published	Dr Kalpana S Thakre	Communication Efficient Federated Learning System with Data Protection and Data Security (Federal Republic of Germany)	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">7</a>
8	20234103524 3 A	Published	Dr. H. M. Jadhav	TAXONOMY FOR MICRO FACIAL EXPRESSION AND FORGERY DISCRIMINATION	Marathwada Mitra Mandal's College of Engineering, Karve Nagar, Pune, Maharashtra, India, 411052, India	<a href="#">8</a>

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(54) Title of the invention : INNOVATIVE TEMPERATURE CONTROL SYSTEM INSIDE A VEHICLE.

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**(71)Name of Applicant :**

1)Swanand Sudhakar Kirpekar

Address of Applicant :Marathwada Mitramandal's College of Engineering Sr.No. 18, Plot No. 5/3, CTS No.205, Vadar Vasti Rd, behind Vandevi Temple, Karve Nagar, Pune, Maharashtra 411052 -----

2)Padmayya Shaniyara Naik

3)Vivekanand A Naikwadi

Name of Applicant : NA

Address of Applicant : NA

**(72)Name of Inventor :**

1)Swanand Sudhakar Kirpekar

Address of Applicant :Marathwada Mitramandal's College of Engineering Sr.No. 18, Plot No. 5/3, CTS No.205, Vadar Vasti Rd, behind Vandevi Temple, Karve Nagar, Pune, Maharashtra 411052 -----

2)Padmayya Shaniyara Naik

Address of Applicant :Anjuman Institute of Technology and Management Belalkanda, Bhatkal, Karnataka 581320 Bhatkal -----

**(57) Abstract :**

Abstract:- Thermal comfort is an essential factor for humans in enclosed environments such as passenger automobiles. India is a tropical country with summer temperatures ranging from 450 to 500 degrees Celsius. If a vehicle is parked in such a heated atmosphere for more than 30 minutes, the internal temperature can rise to 600 to 700 degrees Celsius. Temperature rise is affected by Sun locations such as solar azimuth angle and solar altitude angle. If the owner, passenger, or driver enters a hot vehicle, they will experience suffocation and will have no thermal comfort. It is impossible to bring the temperature down to a comfortable level in a short period of time. To manage the temperature, there are two options: turn on the air conditioner or open all windows. When we utilise the air conditioning system to adjust the temperature, it takes longer to achieve a comfortable level and puts greater strain on the engine system. When the temperature is adjusted by opening all windows, it takes longer to reach a pleasant temperature. It is dependent on the outside temperature; if the outside temperature is more than, opening the window will not allow you to attain a comfortable temperature.

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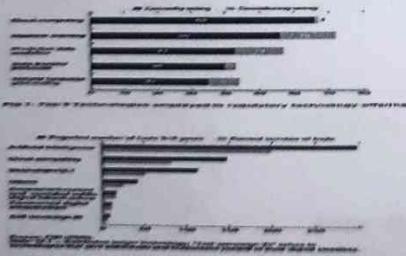
(21) Application No.202321058290 A  
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(54) Title of the invention : CYBER SECURITY RISK ASSESSMENT AND MANAGEMENT SYSTEM USING AI AND ML FOR ENTERPRISE NETWORK

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(71) Name of Applicant :  
1)Dr. Mayura Vishal Shelke  
Address of Applicant :AISSMS IOIT, Kennedy Rd, Near RTO, Sangamvadi, Pune,  
Maharashtra 411001. \_\_\_\_\_  
2)Swanand Kirpekar  
3)Ms.Bhagyashree Dagadu Lambture  
4)Mrs.Sayali Aditya Belhe  
5)Radha Shirbhate  
6)Richa Agnihotri  
7)Vandana Vinayak Navale  
8)Varsha Rahul Dange  
Name of Applicant : NA  
Address of Applicant : NA  
(72) Name of Inventor :  
1)Dr. Mayura Vishal Shelke  
Address of Applicant :AISSMS IOIT, Kennedy Rd, Near RTO, Sangamvadi, Pune,  
Maharashtra 411001. \_\_\_\_\_  
2)Swanand Kirpekar  
Address of Applicant :Marathwada Mitramandal's College of Engineering, Sr.No 18, Plot No  
5/3, CTS 205, Vadar Vasti Road, behind Vandevi Temple, Karve Nagar, Pune, Maharashtra  
411052. \_\_\_\_\_  
3)Ms.Bhagyashree Dagadu Lambture  
Address of Applicant :AISSMS IOIT Kennedy Rd, Near RTO, Sangamvadi, Pune,  
Maharashtra 411001. \_\_\_\_\_  
4)Mrs.Sayali Aditya Belhe  
Address of Applicant :AISSMS IOIT, Kennedy Rd, Near RTO, Sangamvadi, Pune,  
Maharashtra 411002. \_\_\_\_\_  
5)Radha Shirbhate  
Address of Applicant :G H Raisoni College of Engineering and Management Wagholi Pune. -  
6)Richa Agnihotri  
Address of Applicant :G H Raisoni College of Engineering and Management, Wagholi, Pune. -  
7)Vandana Vinayak Navale  
Address of Applicant :AISSM's College of Engineering, No. 1, Kennedy Road, Near RTO  
Office Sangamvadi, Shivajinagar, Pune, Maharashtra 411001.  
8)Varsha Rahul Dange  
Address of Applicant :Vishwakarma Institute of Technology, 666, Upper Indiranagar,  
Bibwewadi, Pune, Maharashtra, India - 411 037. \_\_\_\_\_

(57) Abstract :  
The financial sector, led by financial technology (fintech) companies, has been rapidly increasing the use of AI/ML systems (Box 1). Recent adoption by the financial sector of technological advances, such as big data and cloud computing, coupled with the expansion of the digital economy, made the effective deployment of AI/ML systems possible. A recent survey of financial institutions (WEF 2020) shows that 77 percent of all respondents anticipate that AI will be of high or very high overall importance to their businesses within two years. This study explores the use of artificial intelligence (AI) and machine learning (ML) in the financial sector and the resultant policy implications. It provides a nontechnical background on the evolution and capabilities of AI/ML systems, their deployment and use cases in the financial sector, and the new challenges they present to financial sector policymakers. Accompanied Drawing [FIG. 1] [FIG. 2]



No. of Pages : 29 No. of Claims : 3

## Design Application Details

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### Applicant Name:

1. Dr. Anuradha Vishwajit Yenkikar      2. Mrs. Pradnya Mehta      3. Dr. Rutuja Kadam  
4. Ms. Pranjal Pandit      5. Mr. Amol Vijay Patil      6. Dr. Omkaresh Kulkarni  
7. Mr. Amol Suryavanshi      8. Mrs. Grishma Bobhate      9. Mr. Ganesh Kadam  
10. Mrs. Vidya Vinod Jagtap      11. Mr. Chitrakant Banchhor  
12. Mr. Yogesh Janardhan Pawar

## Design Application Status

### Application Status:

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[Back \(/DesignApplicationStatus/\)](#)

Disclaimer: Application status is available for the application filed on or after 1st April 2009 with application no 222230.The information under " Design Application Status" is dynamically retrieved and is under testing, therefore the information retrieved by this system is not valid for any legal proceedings under the Design Act 2000. In case of any discrepancy you may contact the appropriate Patent Office or send your comments to following email IDs:

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Department of Industrial Policy & Promotion,  
Ministry of Commerce & Industry.  
Government of India

संवर्धन जयन्ते



#### Application Details

APPLICATION NUMBER	202341052710
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	05/08/2023
APPLICANT NAME	<p>1 . DR.KAVITHA H 2 . DR.S.VANAJA 3 . ANURADHA SHARMA 4 . DR.N.SURESH 5 . BABITA VERMA 6 . SEEMA VERMA 7 . DR. NEHAJAIN 8 . DR. P. L. KISHAN KUMAR REDDY 9 . DR. P. KIRAN KUMAR REDDY 10 . DR. P. RAMKISHORE KUMAR REDDY</p>
TITLE OF INVENTION	AUTOMATED BUG DETECTION AND REPAIR IN SOFTWARE USING DEEP LEARNING
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	mail2patentipr@gmail.com
ADDITIONAL-EMAIL (As Per Record)	mail2patentipr@gmail.com
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(51) International classification	:G06N002000000, G06F0021620000, G06K0009620000, G06N0003080000, G06N0020200000	(71) <b>Name of Applicant :</b> <b>1)Mrs. Yogita Sachin Narule</b> Address of Applicant :Department of Computer Engineering, Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune-411052, India ----- <b>2)Dr. Kalpana Sunil Thakre</b> <b>3)Dr.Kamal Upreti</b> <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	<b>(72)Name of Inventor :</b>
Filing Date	:NA	<b>1)Mrs. Yogita Sachin Narule</b> Address of Applicant :Department of Computer Engineering, Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune-411052, India -----
(87) International Publication No	: NA	<b>2)Dr. Kalpana Sunil Thakre</b> Address of Applicant :Department of Computer Engineering, Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune-411052, India -----
(61) Patent of Addition to Application Number	:NA	<b>3)Dr.Kamal Upreti</b> Address of Applicant :Department of Computer Science, CHRIST(Deemed to be University), Delhi NCR, Uttar Pradesh 201003, India -----
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(57) Abstract :

ABSTRACT COMMUNICATION EFFICIENT FEDERATED LEARNING SYSTEM WITH DATA PRIVACY AND DATA SECURITY Aspects of present disclosure the client selection module (101) using client selection federated (FedCS) techniques selects number of clients for training process. The client device (102) configured with the client selection module (101) store necessary training data locally, and the client device send non sensitive information to a central server (103). In another aspect the central server (103) is configured with the processor (104), and the processor using TensorFlow Federated module (105) and machine learning techniques (106) generate a locally trained model. The processor (104) retain the locally trained model until developing a standard trained model and deploys in end user device (107).

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#### Application Details

APPLICATION NUMBER	202341035243
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APPLICANT NAME	<p>1 . Dr. Shiju George 2 . Dr. Jyothi Pillai 3 . Dr. Asha Joseph 4 . Hemlata Makarand Jadhav 5 . Nakka Kishore Chandra Dev 6 . Bhakti Prasad Thakre 7 . Ms. Uma Yadav 8 . Ms. Shweta v. Bondre</p>
TITLE OF INVENTION	ADVANCE TAXONOMY FOR MICRO FACIAL EXPRESSION AND FORGERY DISCRIMINATION
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	senanipindia@gmail.com
ADDITIONAL-EMAIL (As Per Record)	admin@senanip.com
E-MAIL (UPDATED Online)	
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APPLICATION STATUS

## Awaiting Request for Examination

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→ Filed → Published → RQ Filed → Under Examination

→ Disposed

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