

### **Department of Computer Science and Engineering**

### List of Patents

S.No.	Title of the Patent	File Number	Date	Names of the Patenter	Status
	2023-24				
1.	RIDE SAFEGUARD:A Holistic Approach to Rider Safety and Demand Prediction	202441041243	31/05/2024	DR.G.Charles Babu	2024 Published
2.	Precision Agriculture Platform: Optimizing Crop Management For Sustainable Yields	202441041244	31/05/2024	DR.G.Charles Babu	2024 Published
3.	Creating a Visual-Based Authentication System Utilizing CCP	202441041245	31/05/2024	DR.G.Charles Babu DR.B.Sankara Babu	2024 Published
4.	Digital Certificate Authentication System Using Block Chain Technology	202441023701 A	05/04/2024	Dr.B.Sankara Babu	2024 Published
5.	A Hybrid System For Automatic Speed Control And Alarm For Abnormal Driving Vehicle	202441016140 A	29/03/2024	B.Geetha Kumari	2024 Published
6.	Implementation Of Hybrid Deep Learning Models For Battery Systems In Real World Electric Vehicles	202331048934 A	13/10/2023	Dr.G N Beena Bethel	2023 Published



## (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

Application Details			
APPLICATION NUMBER	202441041243		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	28/05/2024		
APPLICANT NAME	GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY		
TITLE OF INVENTION	RIDE SAFEGUARD: A HOLISTIC APPROACH TO RIDER SAFETY AND DEMAND PREDICTION		
FIELD OF INVENTION	COMPUTER SCIENCE		
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in		
ADDITIONAL-EMAIL (As Per Record)			
E-MAIL (UPDATED Online)			
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE			
PUBLICATION DATE (U/S 11A)	31/05/2024		

Application Status				
APPLICATION STATUS	Awaiting Request for Examination			

# TITLE OF THE INVENTION: Ride Safeguard: A Holistic Approach to Rider Safety and Demand Prediction

**IN----:** Computer Science and Engineering

Name	Nationality	Address	
APPLICANTS			
GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY	INDIAN	Department of CSE, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupalli, Kukatpally, Hyderabad, India, 500090	
INNOVATORS:			
Dr. G. CHARLES BABU	INDIAN	Department of CSE, GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY, Nizampet Rd, Kukatpally, Hyderabad, Telangana, India, 500090	
P.GOPALA KRISHNA	INDIAN	Department of IT, GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY, Nizampet Rd, Kukatpally, Hyderabad, Telangana, India, 500090	
Dr.K.PRASANNA LAKSHMI	INDIAN	Department of IT, GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY, Nizampet Rd, Kukatpally, Hyderabad, Telangana, India, 500090	
Dr.R.P.RAM KUMAR	INDIAN	Department of AIML, GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY, Nizampet Rd, Kukatpally, Hyderabad, Telangana, India, 500090	
Dr.S.GOVINDA RAO	INDIAN	Department of CSE, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupalli, Kukatpally, Hyderabad, India, 500090	



## (http://ipindia.nic.in/index.htm)

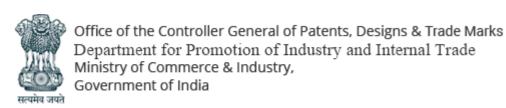


(http://ipindia.nic.in/index.htm)

Application Details			
APPLICATION NUMBER	202441041244		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	28/05/2024		
APPLICANT NAME	1 . GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY 2 . Dr. G. CHARLES BABU 3 . P.GOPALA KRISHNA 4 . T.ASWINI DEVI 5 . Dr.Ch. VIDYADHARI 6 . VADICHERLA VIDYA 7 . P. RASAGNA REDDY 8 . K. VYSHNAVI 9 . S. SAI SRI HARSHINI		
TITLE OF INVENTION	PRECISION AGRICULTURE PLATFORM: OPTIMIZING CROP MANAGEMENT FOR SUSTAINABLE YIELDS		
FIELD OF INVENTION	COMPUTER SCIENCE		
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in		
ADDITIONAL-EMAIL (As Per Record)			
E-MAIL (UPDATED Online)			
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE			
PUBLICATION DATE (U/S 11A)	31/05/2024		

Application Status		
APPLICATION STATUS	Awaiting Request for Examination	

	View Documents
--	----------------



## (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

Application Details			
APPLICATION NUMBER	202441041245		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	28/05/2024		
APPLICANT NAME	1 . GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY 2 . Dr. G. CHARLES BABU 3 . Dr.B.SANKARA BABU 4 . P.GOPALA KRISHNA 5 . B. PRANAVA KRISHNA 6 . S. NAVEEN KUMAR 7 . A. SIDDARTH YADAV 8 . N. SHASHI KUMAR 9 . B. DAVID		
TITLE OF INVENTION	CREATING A VISUAL-BASED AUTHENTICATION SYSTEM UTILIZING CCP		
FIELD OF INVENTION	COMPUTER SCIENCE		
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in		
ADDITIONAL-EMAIL (As Per Record)			
E-MAIL (UPDATED Online)			
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE			
PUBLICATION DATE (U/S 11A)	31/05/2024		

Application Status		
APPLICATION STATUS	Awaiting Request for Examination	

	View Documents
--	----------------

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(51) International

(86) International

(87) International

Publication No.

Filing Date

Application Number

Filing Date (62) Divisional to

Application Number

Filing Date

(61) Patent of Addition to

Application No

classification

(22) Date of filing of Application :26/03/2024

:H04L0009080000, B65D0047020000,

B60K0035000000, G06Q0030000000,

H04L0009300000

:NA

:NA

: NA

:NA

:NA

:NA

:NA

(21) Application No.202441023701 A

(43) Publication Date: 05/04/2024

#### (54) Title of the invention: DIGITAL CERTIFICATE AUTHENTICATION SYSTEM USING BLOCKCHAIN TECHNOLOGY

(71)Name of Applicant:

1)MADHUKAR CHERUKURI, EDP Manager

Address of Applicant : A-1/124 First Floor, Rohini Sector-16, Delhi-521101. ---

-----

2)Dr. DHANANJAYA REDDY, Associate Professor of Mathematics

3)Dr. RAKHI CHAWLA, Associate Professor

4)Dr. B.SANKARA BABU, Professor

5)K. MAHESHWARI, Assistant Professor

6)Dr. CH. ASHA IMMANUEL RAJU, Associate Professor

7)Dr. I. LAKSHMI, Associate Professor

8)D.VENKATESAN, Assistant Professor, Dept. of CSM

9)S. BAVANKUMAR, Assistant Professor, Dept. of CSE

Name of Applicant : NA Address of Applicant : NA

(72)Name of Inventor:

1)MADHUKAR CHERUKURI, EDP Manager

Address of Applicant: A-1/124 First Floor, Rohini Sector-16, Delhi-521101. -----

2)Dr. DHANANJAYA REDDY, Associate Professor of Mathematics

Address of Applicant :Government Degree College, Karvetinagaram, Chittoor dist,

Andhra Pradesh, India-517582. ----- 3)Dr. RAKHI CHAWLA, Associate Professor

Address of Applicant :New Delhi Institute of Management, Tughlakabad

Institutional Area, Vayusenabad, New Delhi, Delhi 110062. ---

4)Dr. B.SANKARA BABU, Professor Address of Applicant :Gokaraju Rangaraju Institute of Engineering and

Technology, Nizampet Rd, Kukatpally, Hyderabad, Telangana 500090 -----

5)K. MAHESHWARI, Assistant Professor

Address of Applicant :St.Mary's Centenary Degree College, H.No.10-186/3, Vasanthapuri Colony, Lane No.3, Opp. Anukrushna Hospital, Malkajgiri,

Hyderabad. 5000047 -----

6)Dr. CH. ASHA IMMANUEL RAJU, Associate Professor Address of Applicant: Andhra University College of Engineering, Andhra University, Visakhapatnam, Andhra Pradesh, India, 530003.

7)Dr. I. LAKSHMI, Associate Professor

Address of Applicant :Hindustan Institute of Technology and Science, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Tamil Nadu 603103. ----------

8)D.VENKATESAN, Assistant Professor, Dept. of CSM

Address of Applicant: St. Martin's Engineering College Sy. No. 98 & 100, Dhulapally Road, Dhulapally, Near Kompally, Medchal—Malkajgiri district Secunderabad-500 100. Telangana, India.

9)S. BAVANKUMAR, Assistant Professor, Dept. of CSE

Address of Applicant: St. Martin's Engineering College Sy. No. 98 & 100, Dhulapally Road, Dhulapally, Near Kompally, Medchal—Malkajgiri district Secunderabad-500 100. Telangana, India.

### (57) Abstract

According to India's Ministry of Education, roughly one million graduates are produced each time; some will continue their education in nations, high seminaries, or post-secondary institutions, while others will be prepared to enter the pool. Throughout their studies, the scholars' great performance instruments, score reiterations, warrants, and other documents will serve as significant references for admission to new seminaries or jobs. Only the names of the seminaries and the scholars are entered as awards or diplomas are created. Events that affect in the phony of a scale instrument are constantly observed due to the lack of an Effective anti-forge medium. The digital instrument system grounded on blockchain technology would be offered to overcome the problem of instrument counterfeiting. The digital instrument with anti-counterfeit and verifiability could be created using blockchain's changeable property. Testing and quantization are the ways for issuing a digital instrument in this system. Our operation runs in offline mode

No. of Pages: 10 No. of Claims: 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/03/2024

(51) International classification G06Q0050300000, G06N002000000

·NA

:NA

:NA

:NA

:NA

(86) International Application

(87) International Publication

(61) Patent of Addition to

Filing Date

Application Number

Filing Date (62) Divisional to Application

Filing Date

(21) Application No.202441016140 A

(43) Publication Date: 29/03/2024

#### (54) Title of the invention: A HYBRID SYSTEM FOR AUTOMATIC SPEED CONTROL AND ALARM FOR ABNORMAL DRIVING VEHICLE

2)BOYA DIVYA

Address of Applicant :G H Raisoni Collge Of Enginerring, Nagpur, Maharastra, 440016 ---

4)BISTI GEETHA KUMARI 5)BOYA SRAVYA 6)G.TAVANYA 7)M. SINDHUJA 8)Dr. VRUSHALI VINAYAK GAIKE 9)S. BAVANKUMAR Name of Applicant : NA Address of Applicant : NA

(72)Name of Inventor: 1)DURGA PRASAD ROY

(71)Name of Applicant: 1)DURGA PRASAD ROY

3)J. VENKATARANGAN

Address of Applicant :G H Raisoni Collge Of Enginerring, Nagpur, Maharastra, 440016 ------

2)BOYA DIVYA

Address of Applicant :Gokaraju Rangaraju Institute of Engineering and Technology,

Kukatpally, Hyderabad, Telangana 500090 -

3)J. VENKATARANGAN

Address of Applicant :St.Martin's Engineering College Sy. No.98 & 100, Dhulapally Road, Dhulapally, Near Kompally, Medchal-Malkajgiri district Secunderabad-500 100. Telangana,

4)BISTI GEETHA KUMARI

Address of Applicant :Gokaraju Rangaraju Institute of Engineering and Technology,

Kukatpally, Hyderabad, Telangana 500090 --

5)BOYA SRAVYA

Address of Applicant :Gokaraju Rangaraju Institute of Engineering and Technology,

Kukatpally, Hyderabad, Telangana 500090 -

6)G.TAVANYA

Address of Applicant :Gokaraju Rangaraju Institute of Engineering and Technology,

Kukatpally, Hyderabad, Telangana 500090

7)M. SINDHUJA

Address of Applicant :St.Martin's Engineering College Sy. No.98 & 100, Dhulapally Road, Dhulapally, Near Kompally, Medchal-Malkajgiri district Secunderabad-500 100. Telangana,

8)Dr. VRUSHALI VINAYAK GAIKE

Address of Applicant :Savitribai Phule Pune University, Pune, Maharashtra, 411007 ------

9)S. BAVANKUMAR

Address of Applicant :St.Martin's Engineering College Sy. No.98 & 100, Dhulapally Road, Dhulapally, Near Kompally, Medchal-Malkajgiri district Secunderabad-500 100. Telangana,

:G06N0003080000, G06N0003040000, G06K0009620000,

. Video-based abnormal driving behavior detection is becoming more and more popular for the time being, as it is highly important in ensuring safeties of drivers and passengers in the vehicle, and it is an essential step in realizing automatic driving at the current stage. Thanks to recent developments in deep learning techniques, this challenging detection task can be largely facilitated via the prominent generalization capability of sophisticated deep learning models as well as large volumes of video clips which are indispensable for thoroughly training these data-driven deep learning models. In this project, deep learning fusion techniques are emphasized, and three novel deep learning-based fusion models inspired by the recently proposed and popular densely connected convolutional network (Dense Net) are introduced, to fulfil the video-based abnormal driving behavior detection task for the first time. These three new deep learning-based fusion models are named as the wide group densely (WGD) network, the wide group residual densely (WGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network, and the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the alternative wide group residual densely (AWGRD) network are the respectively. Technically, WGD takes important issues of deep learning models, i.e., the depth, the width and the cardinality, into consideration when designing its model structure based on Dense Net. For the WGRD and AWGRD, they are more sophisticated as the important idea of residual networks with superpositions of previous layers is incorporated. The extensive experiments are conducted to verify the effectiveness of three new models. Their superiority has been suggested based on rigorous comparisons towards several popular deep learning models in this video-based abnormal driving behaviour detection study

No. of Pages: 11 No. of Claims: 4

(21) Application No.202331048934 A

(19) INDIA

(22) Date of filing of Application :20/07/2023

(43) Publication Date: 13/10/2023

#### (54) Title of the invention: IMPLEMENTATION OF HYBRID DEEP LEARNING MODELS FOR BATTERY SYSTEMS IN REAL WORLD ELECTRIC VEHICLES

:G06N0003080000, G06N0003040000, G06N0020000000, (51) International classification G06F0030150000, G06T0019000000 (86) International Application No :01/01/1900 Filing Date (87) International Publication  $\cdot NA$ (61) Patent of Addition to :NA Application Number

:NA

:NA

:NA

(71)Name of Applicant:

1)Abhishek Kumar

Address of Applicant :Research Scholar, Department of Electrical Engineering, National Institute of Technology Durgapur, A Zone Gandhi Avenue 713209 Durgapur -

2)Prof Nirmal Kumar Roy 3)Dr. Subash Ranjan Kabat 4)Prasanthi Gottumukkala 5)Dr. G N Beena Bethel 6)Dr. Pradeep Kumar 7)Dr.M.Chitra 8)Pankaj Ramtekkar 9)Dr S Manivannan 10)Prof Dr. Jvoti Prasad Patra 11)Dr Devabalan Pounraj 12)Dr. M. R. Arun Name of Applicant : NA

Address of Applicant : NA (72)Name of Inventor:

1)Abhishek Kumar

Address of Applicant :Research Scholar, Department of Electrical Engineering, National Institute of Technology Durgapur, A Zone Gandhi Avenue 713209 Durgapur -

2)Prof Nirmal Kumar Roy

Address of Applicant : Professor (HAG), Department of Electrical Engineering, National Institute of Technology, Durgapur 713209 Durgapur -

3)Dr. Subash Ranjan Kabat

Address of Applicant : Associate Professor, Electrical Engineering, Radhakrishna Institute of Technology and Engineering, Bhubaneswar, 752057 Bhubaneswar ----

4)Prasanthi Gottumukkala

Address of Applicant :Assistant Professor, Department of IT, Gokaraju Rangaraju Institute of

Engineering and Technology, Hyderabad, 500090 Hyderabad -

5)Dr. G N Beena Bethel

Address of Applicant :Professor, CSE Dept, Gokaraju Rangaraju Institute of Engineering and

Technology, Hyderabad. 500072 Hyderabad ---

6)Dr. Pradeep Kumar

Address of Applicant : Associate Professor/ ECE , CMR Institute Of Technology, Hyderabad,

Telangana-501401 Hyderabad ----

7)Dr.M.Chitra

Address of Applicant :Assistant Professor/ ECE, Rajalakshmi Institute of Technology,

Chennai - 600124 Chennai -

8)Pankaj Ramtekkar

Address of Applicant : Assistant Professor, Electrical Engineering, G H Raisoni College of

Engineering Nagpur, Nagpur 440016 Nagpur -

9)Dr S Manivannan

Address of Applicant : Assistant Professor, Department of EEE, Bannari Amman Institute of

Technology, Erode, 638401. Erode

10)Prof Dr. Jyoti Prasad Patra

Address of Applicant : Professor Head, EE And EEE, Krupajal Engineering College KEC

Bhubaneswar ---

Pubasasan Kausalyaganga Near CIFA Prasanthi Viha, Puri Bhubaneswar, 751002 Odisha India

11)Dr Devabalan Pounraj

Address of Applicant : Professor, Department of Computer Science and Engineering, BVC Engineering College (Autonomous), Odalarevu - 533210, Allavaram Mandal, Dr B R

Ambedkar Konaseema District, Andhrapradesh Allavaram Mandal --

12)Dr. M. R. Arun

Address of Applicant : Associate Professor, Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D institute of Science and Technology, Chennai - 600062 Chennai --

(57) Abstract:

Filing Date

Filing Date

Number

(62) Divisional to Application

Implementation of hybrid deep learning models for battery systems in real world electric vehicles is the proposed invention. The invention aims at understanding the battery system in real world electric vehicles. The algorithms of deep learning especially hybrid models of deep learning are used for analyzing the efficacy of electric vehicles

No. of Pages: 10 No. of Claims: 4