

# **COIMBATORE INSTITUTE OF TECHNOLOGY**

**(Government Aided Autonomous Institution)**

## **Patents Awarded/ Published**

## DEPARTMENT OF CIVIL ENGINEERING

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr.V.G.Srisanthi	A cost effective unburnt interlocking brick for masonry work and method for construction of the wall with the same.	Published	26.02.2021	202141007152A
2	Dr.S.Arulselvan	Monitoring of the Corrosion Potential of the Reinforcement of the Examined Beams	Published	27.08.2021	202141037136
		Sensitivity of Concrete with Cenospheres to sustainability Indicators	Published	27.08.2021	202141037348
3	Dr.M.Kaarthik	Device for emergency saving and alerting using multivalent and GPS tracker	Published	17.11.2021	202041047714 A
		Method of Synthesising hybrid metal plastic composite and 3D Printing	Published	23.12.2021	2020103162
		Automatic Ticket Collection System in Urban Buses	Published	01.01.2021	202041055502
		Utilisation of Robots in Construction Industry during Covid 19	Published	09.07.2021	202141029138 A
		Utilization of sensors in Concrete to Monitor the curing Process and Compressive Strength of Concrete	Published	12.03.2021	202141008996
		Hydrogen Processing in Alkaline Fuel Cell Obtained From Electrolysis	Published	22.01.2021	202141003077

		A RNN based Spatio Temporal Data Mining model for urban road Planning	Published	17.02.2021	2020104112
4	Dr.V.G.Kalpana	A cost effective unburnt interlocking brick for masonry work and method for construction of the wall with the same.	Published	26.02.2021	202141007152A
5	Dr.T.Karthik Prabhu	A RNN based Spatio Temporal Data Mining model for urban road Planning	Published	17.02.2021	2020104112
		Automatic Ticket Collection System in Urban Buses	Published	01.01.2021	202041055502
		Improving the strength and reducing the cost of rigid concrete pavement by using silica fume as cementitious replacement and steel slag as fine aggregate replacement	Published	23.04.2021	202141016739
6	Mr.M.Gowri Shankar	A RNN based Spatio Temporal Data Mining model for urban road Planning	Published	17.02.2021	2020104112
7	Dr.P.Jagadesh	A RNN based Spatio Temporal Data Mining model for urban road Planning	Published	17.02.2021	2020104112
		Automatic Ticket Collection System in Urban Buses	Published	01.01.2021	202041055502
		Improving the strength and reducing the cost of rigid concrete pavement by using silica fume as cementitious replacement and steel slag as fine aggregate replacement	Published	23.04.2021	202141016739

## DEPARTMENT OF MECHANICAL ENGINEERING

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr.Rajesh Ranganathan	An Apparatus for reducing Decubitus Ulcer	Published	26/04/2019	201941014362
2	Dr.Rajesh Ranganathan	Cushioning Apparatus	Granted	24/01/2020	317504-001
3	A S Krishnan	Shell & Tube Hybrid Double Cross Flow Heat Exchanger	Published	14/06/2019	201941021903
4	Dr.K.Marimuthu, Dr.D.Chandramohan	Artificial Bone Implant	Granted	17.07.2019	316203
5	Rangansamy Naidu Educational Trust, Dr.Rajesh Ranganathan Dr.G.Sivakumar	Customized Split insole for the Diabetic Patients	Published	01-08-2019	US20190231578A1
6	Rangansamy Naidu Educational Trust Dr.Rajesh Ranganathan Dr.G.Sivakumar	Process of Manufacture of Customized Split Insole for Diabetic Patients	Published	01-08-2019	US20190232562A1
7	Dr.A..Saravanan Dr.Medapasti Srinivasa Reddy Mr.P.Ramakrishnan Dr.D.Gnanaraj Dr.A.Rameshkumar	C-Shapped Baffle plate solar air heater for enhancing heat transfer rate	Published	16/08/2019	201941031249 A
8	Arivazhagan S Suganya Priyadharshini G	Virtual reality based wireless rescue robot and a method to rescue child fallen into deep well	Published	20/12/2019	20194109461
9	Dr A S Krishnan, T Venkatajalapathi, P Kumaresan, Balaji D, Neha Khatri, Dharamraj	Apparatus and Method for Electronic Equipment Cooling Using Dual Coolant Technology	Published	20/03/2020	202041010009

	Saini, S Rubesh, N Nandeesh, S Shiva and K Pavithra				
10	D. Sudheesh Arputham T.Yuvan Nethaji V.Sujith Kumar S.Mohaideen Dr. Suganya Priyadharshini G	Gearless slider flapping wing mechanism	Published	17/7/2020	202041028640
11	Balaji. D Dr.Suganya Priyadharshini.G Dr.T. Sathish kumar Dr. P. Gowtham P. Eswari Dr. M.R.Arun T. Kannan	3D printed PLA sheets Embedded bio Composite Manufacturing Method Thereof	Published	31.07.2020	202041029849
12	Balaji Devarajan, Priya A.K, Arun M.R, Suganya Priyadharshini G, Jafrey Daniel James D, Ganesan R, Ayyagari Srinagesh, Priyadharshini Muthukrishnan	Flying vehicle abetted additive manufacturing	Granted	11-11-2020	2020102593
13	Dr.M.Velliangiri Mr.M.Karthikeyan Dr.G.Suresh Kannan Mr.K.Karthik Mr.S.Yuvaraj	APGE - Vehicle; Automatic Power Generating Electric Vehicle and their charging unit.	Published	25/12/2020	202041053655
14	M.Arunachalam B.Ramanathan V.Sathiskumar B.Rathnaprakash Dr.Tony Punnoose Valayil	Single Unit Multiple Size Allen Key	Published	23/04/2021	202141016996

15	Dr.M.Velliangiri Mr.M.Karthikeyan Dr.G.Suresh Kannan Mr.K.Karthik Mr.S.Yuvaraj	Fuel Indication System: Display and Notified Fuel Status in Tank (Car,Bike,Scotty)	Published	14/05/2021	202141020094
16	Mr. Gunaseelan. S Dr.G.Suganya Priyadarshini	Interactive Toy Tto Learn Multiplication Table	Published	23.07.2021	202141031128
17	Dr.R.Marappan, Dr.A.Karthikeyan, Dr.N.Shivasankaran, Mr.Sabarinath, Mr.P.Santhosh Kumar	Device for rescuing trapped victims from bore-wells and method thereof	Granted	13.05.2022	3490/CHE/2014

## **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

<b>S. No.</b>	<b>Name of the faculty member</b>	<b>Title of the patent</b>	<b>Published/ granted</b>	<b>Date</b>	<b>Registration/ Application Number</b>
1	Dr.R.Prabhakar,Dr.E.Chandira Sekaran,Dr.V.Selladurai and Dr.S.Vasantharathna	Dual Fuel Integrated Hybrid Cooking Stove	Published	15/2/2019	201641012097

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr.A.Rajeswari	System and method for identification of intruder	Published	13.03.2020	202041009608 A
		Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548
2	Dr.M.Poongothai	IoT Based Indoor Air Quality and Smart Energy Management System	Published	21.01.2022	202141058674A
3	Dr.B.Premalatha	Compressive sensing based Real Time Multimodal Emotion Recognition system for Tamil Native Speakers	Published	31.01.2020	202041003164A
4	Dr.I.S.Akila	An Internet of Things (IoT) based system for combining Aquaculture and Hydroponic Environments	Published	07.06. 2019	201941021516
5	Ms.Cynthia Joseph	Compressive sensing based Real Time Multimodal Emotion Recognition system for Tamil Native Speakers	Published	31.01.2020	202041003164A
6	Ms.C.Subha priyadharshini	Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548
7	Ms. T. Shunbaga Pradeepa	An automated robotic device for domestic cleaning and alerting especially for care of pet animals	Published	01.11.2019	201941043178
8	Ms.S.Dhanalakshmi	IoT Based Indoor Air Quality and Smart Energy Management System	Published	21.01.2022	202141058674A
9	Ms. V. Sowmya	Compressive sensing based Real Time Multimodal Emotion Recognition system for Tamil Native Speakers	Published	31.01.2020	202041003164A
10	Dr.G.Puvaneswari	System and method for identification of intruder	Published	13.03.2020	202041009608 A

11	Dr.G.Puvaneswari	Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548
12	N.Deepa	Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548
13	Dr.B.Bhuvaneshwari	Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548
14	S.Bala Dhanalakshmi	System and method for identification of intruder	Published	13.03.2020	202041009608 A
		Smart home surveillance system using iot application with warning of intruder activities	Granted	22.6.2021	2021103548

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

<b>S. No.</b>	<b>Name of the faculty member</b>	<b>Title of the patent</b>	<b>Published/ granted</b>	<b>Date</b>	<b>Registration/ Application Number</b>
1	Dr.R.Prabhakar	Multi Fuel Integrated Hybrid Cooking Stove	Filed		201641012097
2	Dr. R. Nedunchezian	Data driven automatic energy drink maker and ideal food menu recommended using ecological footprints	Published	05.04.2019	201941011725A
3	Dr. R. Nedunchezian, K.Sathya	Smart Mobile Mosquito trap device	Published	13.03.2020	202041009996
4	Dr. R. Nedunchezian, S.Saranya	Internet of Things(IOT)- Enabled user-friendly rain coat for Indian women	Published	12.02.2021	202141003951

5	Mr.V.C.Eugin Martin raj, Abirami S.P., Anil Mahadeo Hingmire, A.Priyadharshini, C.Suresh Ganesh	Intelligent AI and IOT based Energy management system architecture for smart grid Technology	Published	15/09/2021	202141041761
6	jabez.J,Abirami S.P.,Priyadharshini A,Dinesh Bhatia, M.Venmathi,P.Anbarasan,M.Vijayaragavan	Smart AI-Powered Medical Platform with virtual nursing Assistants	Published	21/10/2021	202141047796
7	Punidha.A Rajinsha.S Rudhradharshini .A Keerthana Boopathi Vanipriya Moorthi	Thought Tunes : A Smart Music Player involving Mind-state Awareness	Filed	08.03.2019	201941007423
8	Dr. E.Arul Dr.Nambiyur krishnasamy karthikeyan Dr. Sangeetha Manikkam Ms.A.Punidha	Artificial intelligence and internet of things based applied manpower safety controller for micro, small & medium enterprises	Filed	04.09.2020	202041033579
11	Abirami S.P., G.Kousalya	A system for multi-modal based interest/anxiety identification of autistic children via eye gaze analysis	Published	05/04/2022	202241020380
12	Dr.M.Sangeetha, Dr.A.Kunthavai, V.Jeba Priya, R.Rammia,S.Sahramila,S.Sruthi	Hazard Prevention and Automatic Gas booking using cyber physical System for home safty	Published	21.08.2020	202041027700 A
13	D.Palanikumar,.S.Priya ,S.Jagannathan	A Systems And Methods For Instantiating And Operating A Virtual Appliance Monitor In A Cloud Network	Published	27.04.2018	201841015067 A

14	D.Palanikumar,.S.Priya ,S.Jagannathan	A method and system for a big data analytics enterprise framework	Published	11.05.2018	201841016411 A
15	M.Prabhavathy, S.SaranyaRubini, R.Saveeth	An internet of things (IOT) based tracking system for the real time health conditions of patients in intensive care units (ICUS) in hospitals.	Published	13.12.2019	201941050577A
16	Dr.M.Sangeetha, Ms. S.Nithya, Ms. K.N Apinaya Prethi,	An Internet of Things (Iot) Based Device and System for Conservation and Preserving of Tress from Human Intervention Activities like Construction Etc	Published	22.02.2019	201941005521

## DEPARTMENT OF INFORMATION TECHNOLOGY

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr.N.K.Karthikeyan ,M.Sangeetha	System For Detection of Leukemia Using Hidden Markov Model And Adaptive Neuro Fuzzy Inference System	Published	16/02/2018	201841004916
2	Dr.R.Nedunchezian Dr.M.Rajalakshmi, Mrs.Ambily Balaram, Ms.T. Abinaya Devi, Mr.V.Arun, Ms.K.Ashwathi and Ms.S.Aswini	Data-Driven Automatic Energy Drink Maker and Ideal Food Menu Recommender using Ecological Footprints	Published	5/4/2019	201941011725
3	Dr.R.Nedunchezian Dr.M.Rajalakshmi Dr.Jasma Balasangameshwara Dr.R.S.Somasundaram Mrs.K.Sathya Dr.S.Balamurugan	Smart Mobile Mosquito Trap Device	Published	13/03/2020	202041009996
4	Dr. R. Nedunchezian, Dr. M. Rajalakshmi, Ms. S. Devi, Ms. S. Saranya, Dr. V. Vijayalakshmi, Dr. K. M. Pachiyappan, Dr. S. Venkata Krishna Kumar and Ms. R. Divya	Internet of Things (IoT) - Enabled User-Friendly Rain Coat for Indian Women	Published	07/02/2021	202141003951

5	Dr.M.Sangeetha K.N Apinaya Prethi S.Nithya	An Internet of Things Based Device and System for Conservation and Preserving of Trees from Human Intervention Activities	Published	22/02/2019	201941005521A
6	Dr.M.Sangeetha, Dr.A.Kunthavai, V.Jeba Priya,R.Rammia, S.Sharmila, S.Shruti	Hazard Prevention and Automatic Gas Booking using Cyber Physical System(CPS) for Home Safety”	Published	21/08/2020	202041027700 A
7	Dr.Easwaramoorthy Arul Dr.Nambiyur Krishnasamy Karthikeyan, Dr.Sangeetha Manikam, Ms.Punidha Angusamy	Artificial Intelligence and Internet Of Things Based Applied Manpower Safety Controller For Micro, Small & Medium Enterprises	Published	05/08/2020	202041033579 A
8	Dr.E.Arul, Srinivas Prabhu R, Faizul Irfan MS, Arunnath G, Kunguma Vishnu S	Intelligent Accident Detection system	Published	26/04/2019	201941012778
9	Dr.E.Arul,Srinivas Prabhu R, Faizul Irfan MS, Arunnath G, Kunguma Vishnu S	A method and system for waste management using Internet of Things	Published	26/04/2019	201941011866

10	Dr.N.Geetha, Madhan Kumar Madhavan, Tridev Shashi Kashyap, Nideesh Balasubramaniam, Mohammed Arruman Shalik	A System and Method for Enhanced security for Data Transmission Over a Computer Network Through Encrypting and a Device for Acheiving the same	Published	17/08/2018	201841029752
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## DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ application number
1	M.Prabhavathy	An internet of things (iot) based tracking system for the real time health conditions of patients in intensive care units (icus) in hospitals.	Published	Feb, 2019	Publication Level

## DEPARTMENT OF PHYSICS

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
2	Dr.C.P.Yoganand	Process for Preparation of Nanodiamond having fluorescent and sparkling properties	Published	11.06.2020	WO2020/115754 A1
3	Dr.C.P.Yoganand	Nanodiamond with fluorescent and sparkling properties	Published	11.06.2020	WO2020/115755 A1

## DEPARTMENT OF CHEMISTRY

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr. S. Syed Jaffer	Nanodiamond with fluorescent and sparkling properties	Published	2020-06-11	WO2020115755A1
2	Dr. S. Syed Jaffer	Process for preparation of nanodiamond having fluorescent and sparkling properties	Published	2020-06-12	WO2020115754A1

3	Dr. S. Syed Jaffer	L- histidine molecule based hydrogel	Published	2021-01-31	WO2019021143A1
4	Dr. S. Syed Jaffer	Process of preparation of l-histidine molecule based hydrogel by gelation of water	Published	2021-02-01	WO2019021144A1

## DEPARTMENT OF COMPUTER APPLICATIONS

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr. SOMASUNDARAM R S	Crowd Detection Intelligent Camera to prevent Covid-19 or any other Need	Granted	16-May-2022	2021102668
		Smart Mobile Mosquito Trap Device	Published	13-Mar-2022	2020041009996
		User usage based Encryption system and method thereof	Published	11-Dec-2020	2020041053162
2	Dr Vishu V	A 16 bit v-rfas key generation method for tracking the human and object movement in a confined location	published	8 April 2022	202241017753
3	Dr. S. Sikappi	Spatial Pattern Run Length Encoding of Images	published	6 April 2018	201841009064
4	S.A.Gunasekaran	A novel proposed autonomic architecture to enforce and assure security in cloud environments	Published	07 May 2021	202141019041
5	Dr.V.Savithri	Analysis and Prediction of Churn Customers using Machine Learning	Published	10 Dec 2021	202141054979

## DEPARTMENT OF SOFTWARE SYSTEMS

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr.A.Saravanan	A monitoring device based smart techniques for elders	Published	29.04.2022	202221017077
		IoT based Performance Investigation System for DC Motor	Published	20.11.2020	202041049691
2	Dr.D.Anandhi	Vehicle Classification with Deep Learning using opencv & Python	Published	14-01-2022	202241000218
3	Dr.P.Aruna	Analysis and Prediction of Churn Customers using Machine Learning	Published	10-12-2021	202141054979A
4	Dr.M.Umarani	Vehicle Classification with Deep Learning using opencv & Python	Published	14-01-2022	202241000218
5	Dr.T.N.Sugumar	A novel proposed autonomic architecture to enforce and assure security in cloud environments	Published	05-07-2021	202141019041A
6	Dr.N.Priya	Hybrid Network Intrusion Dtection System	Published	14.6.2019	201741044546
7	Dr.V.Keerthika	A novel proposed autonomic architecture to enforce and assure security in cloud environments	Published	07.05.2021	202141019041A
8	Dr.C.Stanly Felix	Automatic forced air duct based chicken egg incubator	Published	15-10-2021	202141044794A
		A novel proposed autonomic architecture to enforce and assure security in cloud environments	Published	05-07-2021	202141019041A

## DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

S. No.	Name of the faculty member	Title of the patent	Published/granted	Date	Registration/ Application Number
1	Dr.E.Chandra Blessie	Design Of Fraud Detection In Vehicle Insurance Claims Using Deep Learning Technique	Published	29/10/2021	202141048408 A
2	Dr.E.Chandra Blessie	Deep Learning Approach For Real Time Monitoring Of Wearable Medical Sensor System	Published	10/12/2021	202141056651 A
3	Dr S B Mahalakshmi	Machine learning based irrigation system through implementing the plant leaf images to enhance agricultural production	Published	15/04/2022	202241019567

## DEPARTMENT OF DATA SCIENCE

S. No.	Name of the faculty member	Title of the patent	Published/granted	Date	Registration/ Application Number
1	M Marimuthu, M Sujithra, D Sudha devi, D Manju, V Radhamani, P Velvadivu, K Rajarajeshwari	Facial Emotion Recognition and Detection in Python Using Deep Learning	Published	11/2/2022	202241004709
2	S Chandia, S.Gayathri Devi, V Savithri, P.Aruna, L.Yamuna Devi	Analysis and Prediction of Churn Customers using Machine Learning	Published	10-12-2021	202141054979

3	S.Deivarani	Real time pedestrian crossing detection using deep learning	Published	04/07/2021	202141029987
4	Dr. D. Vimal Kumar , Dr. M. Srividya , Dr.D.Anandhi , Dr. M.Umarani , Dr. Amarendra Mohanty , Mr. Atul Kumar Srivastava , Mr.Gaurav Kumar Rajput , Prof. Jacob Davis K , Dr. Nirajkumar Mehta , Dr. V.Kannan	Vehicle Classification with Deep Learning using opencv & Python	Published	03/01/2022	202241000218

## DEPARTMENT OF DECISION AND COMPUTING SCIENCES

S. No.	Name of the faculty member	Title of the patent	Published/ granted	Date	Registration/ Application Number
1	Dr. R.Umarani Count :2	Impact of Increasing E-Commerce in India during Covid 19	Published	01/10/2021	202141041446
		Organisation of Marketing Activities of Enterprise in the Internet Environment	Published	18/03/2022	202241013635
2	Dr. S. Chandia	Analysis and Prediction of Churn Customers using Machine Learning	Published	10/12/2021	202141054979A
3	Ms. V. Radhamani	Facial Emotion Recognition and Detection in Python using Deep Learning	Published	11/02/2022	202241004709
4	Dr. D. Manju	Facial Emotion Recognition and Detection in Python using Deep Learning	Published	11/02/2022	202241004709