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# DON BOSCO INSTITUTE OF TECHNOLOGY

KUMBALGODU, MYSORE ROAD, BENGALURU-560074, Ph. 080 - 28437028/29/30

Department of Research and Development

## LIST OF PATENTS



**2019**

### ☛ List of Patents Granted

Sl.No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
1	Circuit fault detection and location system.	201941035429	Granted on 04-11-2019	03-09-2019	Dr. Nagaraj P Dr. Sadashivappa G Mr. Manjunath N
2	Embedded power saving model for LED Panels.	201941036971	Granted on 16-11-2019	13-09-2019	Dr. Nagaraj P Dr. Sadashivappa G Mr. Manjunath N

### ☛ List of Patents Published

3	Method of lung cancer detection using machine learning based CT scan image processing.	201941050453	Published	06-12-2019	Dr. Manjunath Swamy B E
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**2020****☛ List of Patents Published**

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
4	Palm, sole (foot) and hip massage base plate with rolling steel balls.	202041057081	Published on E-12/6/2021/Che	31-12-2020	Santosh H P Gobinath Santosh M Neजार
5	Modified piston head to improve the combustion rate in internal combustion engines.	202041048270	Published on 26-03-2022	05-11-2020	Dr. Arun A Magadum Dr. Nataraj K R
6	Raspberry Pi based smart refrigerator to recognize fruits and vegetables remotely.	202041047218	Published on 24-03-2022	29-10-2020	Dr. Santosh M Neजार Dr. Nataraj K R
7	An efficient approach for traffic congestion and management using IoT devices and its implementation on FPGA.	202041047230	Published on 26-03-2022	29-10-2020	Prof. Sheela S Dr. Santosh M Neजार Dr. Nataraj K R

**☛ List of Patent Filed**

8	11ghz Radio transceiver architecture with F-OFDM and 128 QAM modulation for 5g mobile system.	202041042872	Filed	01-10-2020	Dr. Santosh M Neजार Dr. Nataraj K R Dr. Prabhu G
9	Antimicrobial coconut soap composition.	202041047239	Filed	29-10-2020	Dr. J P Shubha Dr. Nataraj K R
10	An intelligent system with gesture control to aid hearing and speech disabled people.	202041048106	Filed	04-11-2020	Dr. Anasuya N Dr. Santosh M Neजार Dr. Nataraj K R

## 2021

### ☛ List of Patents Granted

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
11	Artificial speaking IoT based "Talking Hand" an assistive device for dumb people in regional language Kannada.	2021103792 (Australian)	Granted on 23-03-2022	01-07-2021	Dr. Nataraj K R Dr. Santosh M Nejakar
12	AI based smart meter for water utilization and quality monitoring using IoT.	2021105136 (Australian)	Granted on 20-04-2022	09-08-2021	Dr. Nataraj K R Dr. Santosh M Nejakar
13	Real time traffic management system using machine learning and image processing.	2021105151 (Australian)	Granted on 01-06-2022	09-08-2021	Dr. Nataraj K R Dr. Santosh M Nejakar Prof. Sheela S

### ☛ List of Patents Published

14	Rolling seismic base insulator using stainless steel balls attached to the upper plate of base isolator.	202041056910	Published on E-12/2/2021/Che	08-01-2021	Mr. Santosh H P Mr. Gobinath
15	An artificial intelligence system for biomedical devices monitoring using speech command and IoT.	202141055304	Published on 10-12-2021	29-11-2021	Dr. DeepaYogish
16	IoT based smart water level monitoring system in reservoir using cloud method thereof.	202141049316	Published on 05-11-2021	28-10-2021	Dr. Ashok Kumar P S Dr. Tippeswamy G R
17	Writing Board with Arrangement of Project and Camera	350664-001	Design Accepted and Published, Journal No is 51/2022 and Journal Date is 23/12/2022	04-10-2021	Dr. Manjunathswamy B E Dr. Shivakumar Dalali

18	A wearable pregnancy monitoring apparatus to collect physiological parameters.	353935-001	Design Accepted and Published, Journal No is 02/2022 and Journal Date is 14/01/2022	30-11-2021	Dr. Manjula V
19	A Supermarket Canny Shopping Basket	202441007194 A	Published on 12-03-2021	12-03-2021	Dr. Kursheed B

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20	Artificial intelligence IoT based wrist band for COVID-19 patients.	202141003024	Filed	22-01-2021	Dr. Manjunathswamy B E
21	Traffic police occupational stress model and coping strategies thereof.	202141015753	Filed	02-04-2021	Dr. DeepaYogish
22	AI based automated food serve robot for catering application using IoT.	202141019218	Filed	27-04-2021	Dr. Manjunathswamy B E Dr. ShivakuamrDallali
23	AI based hybrid aircraft for medicine deliveries in remote and disaster areas.	2021106059	Filed	20-08-2021	Dr. Manjunathswamy B E
24	Production of bio fertilizers in solid waste by using automated composting machine.	202141030250	Filed	06-07-2021	Dr. R L Ramesh Prof. Gobinath S

**2022****List of Patents Published**

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
25	Portable 3D scanner.	202241054460	Published on 05-12-2022	22-09-2022	Dr. Bhagya P Mr. Ranjan P Mr. R Prajwal Gowda Mr. Patrick Bruno Mr. Suhas B P Dr. Nataraj K R
26	Voice controlled robot for surveillance.	202241054574	Published on 07-12-2022	23-09-2022	Dr. A N Maheshwarappa Mr. Gowtham R Mr. Harsha D K Mr. Karthik C Mr. Nagaraj M Dr. Nataraj K R
27	Implementation of IoT and data analytics in smart agricultural system.	202241054466	Published on 05-12-2022	23-09-2022	Prof. Rashmi K T Mr. Sanjeev S Tigadi Mr. Darshan Nagesh S Mr. Dharnesh N Swamy Mr. Nikhil K S Dr. Nataraj K R
28	Sandalwood tree detection using deep learning.	202241054775	Published on 05-12-2022	24- 09-2022	Prof. Mohan Kumar A V Ms. Chaitanya Ms. Chandana C A Ms. Archana P Dr. Nataraj K R

29	Early flood warning and water quality detection system using IoT.	202241054776	Published on 05-12-2022	24-09-2022	Mrs. Babitha S Ms. Nithyashree R Ms. Meghana G Ms. Neha Patil Ms. Sathya K Dr. Nataraj K R
30	Automated proctoring system to detect anomalous behaviour in E-learning during times of crisis.	202241054163	Published on 05-12-2022	22-09-2022	Dr. Manjunathswamy B E Mr. Ranjeet Rathod Mr. Padmaraj D M Mr. Rakshith Gowda R Mr. Karthik S Sagar Dr. Nataraj K R
31	Design and fabrication of pulley based movable crane robot.	202241053215	Published on 22-12-2022	17-09-2022	Prof. Dharshan B G Mr. Vishal Mr. Anil Kumar K Mr. Bharath S Mr. Nagendra M S Dr. Nataraj K R
32	Automatic detection and prevention of animals in agriculture fields by using renewable resources.	202241053197	Published on 22-12-2022	17-09-2022	Prof. Dharshan B G Mr. Chandrashekar Mr. Arun Yadav Mr. Nithin B Mr. Mohan S Dr. Nataraj K R
33	Design and fabrication of battery cooling for electric vehicle.	202241053201	Published on 22-12-2022	17-09-2022	Prof. Dharshan B G Mr. Rithvik S Chandra Mr. Ganesh R Mr. Prajwal V A Mr. Sharath Kumar S Dr. Nataraj K R

34	Fabrication of COVID protection sanitization machine for packing and delivering of products	202241053199	Published on 22-12-2022	17-09-2022	Prof. K M Kiran Kumar Mr. Kishore Raj M Mr. Sharath Singh R Mr. Dhureen Kumar H Mr. Naveen N Dr. Nataraj K R
35	Design and fabrication of PIEZO-electric energy harvester from pressure forces developed in automotive tyres.	202241053210	Published on 22-12-2022	17-09-2022	Prof. Manjunath M V Mr. Shivananda D T Mr. Akshay Kumar C Mr. Varun N Mr. Rakesh N Dr. Nataraj K R
36	Neural painting with pixel similarity and progressive rendering.	202241054156	Published on 22-12-2022	22-09-2022	Prof. K M Rajeeth Kumar Mr. Adil Ali Mr. Akash Hazra Mr. Ayush Nigam Mr. Dipayan Paul Dr. Nataraj K R
37	Sudden heart attack detection in COVID affected patients using wearable device.	202241054161	Published on 22-12-2022	22-09-2022	Dr. Venugeetha Mr. Rohith S Mr. Manish N Mr. Manjunath R S Mr. Nithesh B Dr. Nataraj K R
38	E-healthcare support system in both Kannada and English languages.	202241054934	Published on 22-12-2022	26-09-2022	Dr. Anasuya N Mr. Krishna K P Ms. K P Mahalakshmi Ms. Saloni Dr. Nataraj K R
39	Soil Classification for Planting and Monitoring Using FCNN-based IoT Smart Agriculture System		2022	2021	Dr. Emmanvel Raj M Chirchi.

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40	Coconut oil and simarouba leaves extract soap composition for antifungal application.	202241014292	Filed	16-03-2022	Dr. J P Shubha Dr. Nataraj K R
41	Novel anti-theft system for two wheeler and four wheelers.	202241014956	Filed	18-03-2022	Mr. Dinesh Mr. Pawan Mr. Swaraj Mr. Yashas Raj Mr. Rafi Ahamad Z Dr. Nataraj K R
42	Animal security and protection system in forests with sensors, biochips & GPS, using wireless communication.	202241045558	Filed	10-08-2022	Dr. Nagaraja P Dr. Nataraj K R
43	Experimental investigation of partial replacement of aggregate with steel slag and coconut biochar.	202241054937	Filed	26-09-2022	Dr. Ramesh R L Mr. Atif A Jamadar Mr. MD Shukrulla Khan Mr. Obalanayak M S Mr. Akash S Dr. Nataraj K R
44	Effect of recycled asphalt pavement and ground granulated blast furnace slag as a composite material.	202241054959	Filed	26-09-2022	Dr. Ramesh R L Ms. Namitha K Ms. Tejashwini C P Mr. Abhishek Dr. Nataraj K R



**2023**

☛ **List of Patents Granted**

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
45	IOT Enabled Wireless printer with Audio Player		Garnted on 29-05-2023		Dr. Anasuya N J
46	INTELLIGENT VIRTUAL ASSISTANT ROBOT	379058-001	Garnted on 25-04-2023	10-02-2023	Anjali Vyas

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47	An IoT BASED CONTROLLER ASSISTED SMART BIN	202241001148	Published on 23-06-2023	09-05-2023	Dr. Shankara gowda S R
48	Hybrid Polymer Composite Device for Shielding Gamma Rays	202023106042	Published on 20-11-2023	18-10-2023	Dr Karthik Kumar M B
49	SMART DRONE FOR MONITORING		Published on 2023		Dr. Emmanvel Raj M Chirchi.
50	IOT Enabled Wireless printer with Audio Player		Published on 2023		Dr. Anasuya N Jadagerimath

**2023**

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Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
51	3D Printing using Arduino and Driver Board.	202341006140	Filed on	31-01-2023	Dr. Bhagya P Ms. Amruth S Mr. Hebbare Sumeet Mr. Shreedhar Mr. Jayanth Shukla Mr. Vikas M A Dr. Nataraj K R
52	Automated System for over Speed and Alchohol Detection Along with Density Based Traffic Control.	202341006137	Filed on	31-01-2023	Dr. Chandrashekar N S Ms. Rashmi S Ms. Sakshi Damodar Umarji Ms. Shrusti Shetty S Mr. Suraj S Dr. Nataraj K R
53	IoT Based Organ Shipping Container.	202341006139	Filed on	31-01-2023	Prof. Suresha H S Prof. Lakshmi Devi Ms. Chaitanya S Ms. Chandana D Ms. Divyashree B
54	Voice controlled based Automated Vacuum Cleaner.	202341006674	Filed on	02-02-2023	Dr. Akshath M J Ms. Afreen Taj Ms. Kavya Shiddhalinges Hallur Ms. Bhargavi V A Ms. K Kavya Dr. Nataraj K R

55	Automated Floor Cleaning Robot With Voice Control.	202341006669	Filed	02-02-2023	Prof. Deepika A B Mr. Manish Rohith S Mr. Susheel Kumar R Mr. Sidhant Kumar Mr. Vinayaka Barish
56	Idea of Decentralization Using Blockchain In Book Worms Edition.	202341006670	Filed	02-02-2023	Dr. Rajshekar M Patil Mr. Rakshitha N Ms. Ramya S N Ms. Samraddhi Ms. Varsha M K Dr. Nataraj K R
57	Identifying Flooded Area Using Deep Learning Model.	202341006925	Filed	02-02-2023	Prof. Ugrananda Channabasava Ms. Manvitha P M Ms. Spoorthi M S Ms. Tejaswini S Hegde Ms. V S Sai Harshitha Dr. Nataraj K R
58	Multimodal Biometric Authorization using feature fusion of fingerprint and face using CNN approach for Cyber Security.	202341006679	Filed	02-02-2023	Prof. Shankar Gowda S R Ms. Priya Girish Ditur Ms. Sneha Choukimath Mr. Therry Poonacha Mr. Vinayak Malwad
59	Vicious URL Detection Using Machine Learning And Deep Learning.	202341006924	Filed	02-02-2023	Mrs. Chaithra G V Mr. Sanddesh Raja L S Ms. Tejaswini G H Mr. Vishruth T V Mr. Sandeep M N Dr. Nataraj K R

60	Cloud Based Network Intrusion Detection System Using Deep Learning Algorithm.	202341006921	Filed	03-02-2023	Prof. Smitha M S Mr. Ramyashree S Ms. Sneha V Mr. Vismaya R Dr. Nataraj K R
61	Parking Space Detection By Surveillance Camera Using Mask R CNN Algorithm.	202341006922	Filed	03-02-2023	Prof. Emmanvel Raj Chirchi Mr. Prajwal V Mr. Shashank H Ms. Tapasya P Ms. Yuktha Gowda U Dr. Nataraj K R
62	A Novel Approach For Secured Authentication Using Artificial Intelligence And Machine Learning.	202341006923	Filed	03-02-2023	Mrs. Supriya Ms. Rashmitha A Ms. Shashikala G N Ms. Spoorthi C R Ms. Varsha Varghese Dr. Nataraj K R
63	Environmental Friendly Wireless Charging System for Electric Vehicles.	202341006917	Filed on	03-02-2023	Prof. Babitha.S Ms. Bhoomika S Ms. Brunda R Ms. Kavya R Dr. Nataraj K.R.
64	Accident Avoidance in Self-Driven Autonomous Cars.	202341006926	Filed on	03-02-2023	Prof. Babitha.S Mr. Abheer Patil Mr. B G Tejas Mr. B S Jayanth Dr. Nataraj K R
65	Advanced Military Spying and Bomb Disposal Robot System.	202341006918	Filed on	03-02-2023	Dr. A N Maheswarappa Ms. Preksha H Jain Ms. Priyanka R Y Dr. Nataraj K R

66	Advanced Automated Smart Energy Meter Monitoring System Using IoT.	202341007195	Filed	04-02-2023	Prof. Komala D Ms. Devika P U Mr. Dhanush K R Ms. Gagana Shree G R Mr. Gurukanth K R Dr. Nataraj K R
67	A Secured Information Technology for Electronic Voting System using Blockchain.	202341007194	Filed	04-02-2023	Prof. Mrs. Rashmi B C Mr. Kshitij Kashyap Mr. Kshitiz Rai Mr. Mohit Kumar Mr. Prakhar Srivastava Dr. Nataraj K R
68	Rare-Earth Filthy Lucre Prediction using Machine Learning.	202341007188	Filed	04-02-2023	Dr. Manjunathswamy B E Mr. Abhay Kumari Joshi Mr. Aryaman Vijay Ms. Disha Kaur L Dr. Nataraj K R
69	Interent of Things in Agriculture: A Decision Support System for Precision Farming.	202341007190	Filed	04-02-2023	Dr. Manjunathswamy B E Mr. Manoj Kumar I Mr. Monish P Ms. Chaithra M P Ms. Nisarga K Dr. Nataraj K R

## 2024

### ☛ List of Patents Granted

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
70	Automated Aerial Vehicle (AAV)	354840-001	Garnted on 21-02-2024	12-12-2021	Dr. Manu K S

### ☛ List of Patents Published

71	Refining Quality assessment in digital image processing through comprehensive exploration from error visibility to structural similarities with AI and ML based approach.		2024		Dr. Anasuya N Jadagerimath
72	IOT Based online Doctor Robot for Healthcare and Telemedicine Consultation with Patients	202441010550 A	23-02-2024	15-02-2024	Dr. Chethan Chandra S B
73	16-Bit Tri-Gate Finfet Based ALU Designed to Reduce Leakage Power using Dual Power Gated Stack at 20nm Technology	202441007194A	01-03-2024	02-02-2024	Dr. B Kursheed
74	IOT Based Accident Detection and Patient Rescue System	202441039205A	31-05-2024	20-05-2024	Dr. B Kursheed.

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75	Design and Fabrication of Rotary Spark Gap Switch for Plasma Applications: Study on Seed Germination	202441078520	Filed	16-10-2024	Dr. R Anguraja Prof. R Santhosh Kumar Dr. K R Nataraj B S Jayanth Gowda Bharath S P Srinivas N Varshini C
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<b>76</b>	Design and Development of Bladeless wind Turbine for Electrical Power Generation	202441078549	Filed	16-10-2024	Prof. Ramyashree H P Prof. Asma Dr. K R Nataraj Dheenadayal Harshitha C S Jayashree D Akash S
<b>77</b>	Recyclable Pattern Wax Formulation Used in Investment Casting Foundries	202441078484	Filed	16-10-2024	Dr. A J K Prasad Dr. Reddappa Dr. K R Nataraj
<b>78</b>	Load Shedding and Smart-Direct Load control Using Internet of Things in Smart Grid Demand Response Management	202441078869	Filed	17-10-2024	Prof. Sharmila Prof. Rajath Shankar P S Dr. K R Nataraj Keshava Murthy K S Pooja K M KarthikSwamy Hiremath

## ➤ Copyrights Applications Registered

Sl. No.	Title of The Patent	Application Number	Status of Application	Filed Date	Inventor Name
1	Kavana Guccha by Anuprama	17777/2020-CO/L	Registered	05-11-2020	Dr. Anasuya N Jadagerimath
2	Algorithms for the early detection and classification of oral cancer	18124/2020-CO/L	Registered	10-11-2020	Dr. Rajashekhargouda C. Patil
3	Evaluation of Mechanical and Tribological Properties of boron carbide particulates and short basalt fiber reinforced AL2014 based hybrid composites	18415/2020-CO/L	Registered	13-11-2020	Dr. Ranganatha S R
4	Design of Low Power High Speed Analog CMOS Components	L-103545/2021	Registered	15-04-2021	Rashmi Seethur
5	Development of Datamining Model for In Vitro Fertilization (IVF) Data Retrieval.(Copyright Title)	L-125573/2023	Granted	14-06-2023	Dr. Gowramma G S

<b>Total No. of Patents</b>				
AY	Granted	Published	Filed	Total
2019	2	1	0	3
2020	0	4	3	7
2021	3	6	5	14
2022	0	15	5	20
2023	2	4	19	25
2024	1	4	4	9
<b>Total</b>	<b>8</b>	<b>34</b>	<b>36</b>	<b>78</b>



**Dean & Director  
R&D, DBIT.**