

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Patents Published / Granted
(A.Y.-2024-25)*

| S.no | Inventors | Title of the Invention | File No. and Filing Date | Design / Process | Published / Granted with date |
|-------------|---|--|---------------------------------|-------------------------|--------------------------------------|
| 1. | Varsha Reddy Manda Dr. Mahesh Chilaka Dr. Supraja Reddy Ammana Dr. Bhanuchander Marepally Dr. Vinodh Kumar Minchula | Automatic dependent surveillance Broadcast (ADS-B) Receiver for Air Ground Propagation | 202441055433, 19/07/2024 | Process | Published on 26/07/2024 |
| 2. | Chinnaiahgari Silpa Dr. A.Vani Dr. B.Anitha Dr. P.Anitha Leelavathi Rudraksha Supraja Veerabomma Aruna Valasa Dr.B. Mythily Devi N.V.K. Mahalakshmi | AI-Driven Autonomous Network Management and Optimization for Wireless Networks | 202441055118 19/07/2024 | Process | Published on 02/08/2024 |
| 3. | O. M. S. S. N. Vandan Babu, S. Siva Priyanka, Umakanth Choudhury, D. Krishna Reddy | Autism Spectrum Assistive Device | 202441068531, 11/09/2024 | Design | Published on 20/09/2024 |
| 4. | S. Siva Priyanka, B. Rahul Raman, B. Karthik, Umakanta Choudhury | Raspberry Pi Based Text Emotion Recognition System | 202441068445, 11/09/2024 | Process | Published on 20/09/2024 |

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|-------------|--|--|---------------------------------|-------------------------|--------------------------------------|
| 1. | Dr. M. Bhanu Chandra, Mr. V. Maneesh Reddy, Dr. Abhishek Kumar S., Dr. B. Ravi Kumar | Modular Convertible Catalytic Cell | 202241066571 19-11-2022 | Process | Granted 15/03/2024 |
| 2. | Dr. Vivek Singh Kushwah Dr. M. Lakshmi N. Charyulu Dr. C. Venkata Narasimhulu Dr. P. Narahari Sastry Dr. M. Ramana Reddy | AI based Drone for Medical Logistics Delivery | 6345044 06/02/2024 | Design | Granted 21/02/2024 |
| 3. | Dr. Vivek Singh Kushwah Dr. M. Lakshmi Narasimha Charyulu Dr. C. Venkata Narasimhulu Dr. P. Narahari Sastry Dr. M. Ramana Reddy | IoT Enabled Respiratory Sensing Device | 406763-001 06/02/2024 | Design | Granted 18/04/2024 |
| 4. | Dr. Rahul Raj, Himanshu Srivastava, Dr. Paawan Sharma, B. Khaleelu Rehman, Pradyumna Narayan Tiwari | Method and System to Detect Crack in Rail Track | 201811009837 5-03-2018 | Design | Granted 22/12/2023 |
| 5. | Prof. Vivek Singh Kushwah, Kapil Jain, Dr. Praveen Kumar Patidar, Dr. Shally Goyal, Rahul Koshti, Vimlesh kumar Sahu, | Microstrip Patch Antenna for 5G Terahertz Communication | 6294397 05/07/2023 | Design | Granted 12/07/2023 |

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| | Dr. Rinkoo Bhatia, Dr. Sanjay Chouhan | | | | |
| 6. | Dr. Shalini Pathak, Prof. Vivek Singh Kushwah, Dr. Mohan Kantharia, Lokendra Sharma, Dr. Kapil Sharma, Dr. Snehika Shrivastava, Dr. Jyoti Mishra, Dr. Devendra Kumar Mishra | Agriculture farm analyzing system with Internet of Things | 6282293 14/05/2023 | Design | Granted 21/09/2023 |
| 7. | Dr.Yaswanth Kumar Avulapati, Pratibha Pius, Dr.B.Srinivasa Rao, Dr. Pravin, Haribhau Ghosekar Dr.R.K.Gnanamurthy, Dr. Anjum Nazir Qureshi, Chatakunta praveen kumar,Mamatha B, Badepally Mallaiah, Vivek Singh Kushwah, Sanjukta Mohanty | Systematic Approach to Study the factors that have an Impact on Cyber Defense Using Artificial Intelligence Techniques | 202341032941 10/05/2023 | Process | Published 18/08/2023 |
| 8. | R.Raju Nayak Dr. V.G.Sivakumar Dr.M.Rajendra Prasad Dr.S.Thulasi Prasad Dr. K. Vasanth Sateesh A, K. Raja Shekhar M.Vadivel, Dr.Maznu Shaik | Darzaniya Syuta- Smart Wearable Handbag for Women Safety | 202441013822 26/02/2024 | Design | Published 08/03/2024 |

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| 1. | Dr. P. Narahari Sastry, Dr. N.V. Koteswara Rao, Dr. Rama Krishnan Krishnan | System And Method for Palm Leaf Character Recognition Using 2D Haar Wavelet Transform and 3D Feature | 201641000080 01/01/2016 | Process | Granted 04/07/2022 |
| 2. | Prof. Vivek Singh Kushwah, Dr. Abhishek Bhardwaj, Dr. Kuldip Dwivedi, Dr. Mohan Kantharia, Lokendra Sharma, Dr. Jyoti Mishra, Dr. Devendra Kumar Mishra, Dr. Uma Shankar Sharma | IOT based agriculture ROBOT for pesticides spraying | 6282292 14/05/2023 | Design | Granted 31/05/2023 |
| 3. | Prof.Vivek Singh Kushwah, Dr. Kuldip Dwivedi, Dr. Mohan Kantharia, Lokendra Sharma, Dr. Shivendra Singh, Dr. Jyoti Mishra, Dr. Devendra Kumar Mishra, Dr. Uma Shankar Sharma | Animal Tracking Strap using RFID and IOT | 6282294 14/05/2023 | Design | Granted 22/05/2023 |
| 4. | Dr. M. Bhanu Chandra, Mr. V. Maneesh Reddy, Dr. Abhishek Kumar S., Dr. B. Ravi Kumar | Modular Convertible Catalytic Cell | 202241066571 19-11-2022 | Process | Published 25/11/2022 |
| 5. | Vimal Kumar Gupta , Vivek Singh Kushwah, Pankaj Kumar Mishra | An active base isolation control system of building frame using shape memory alloy | 202011057476 31/12/2020 | Process | Published 04/11/2022 |
| 6. | Dr. Sanjay Singh Thakur, Dr. K Dhananjay Rao, | Design and implementation of a smart solar panel with auto rectification and self-phased | 202221036570 25/06/2022 | Design | Published 22/07/2022 |

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| | Dr. Rajkumar Kundlik Chougale, Kiran, Dr. Nimish H. Vasoya, Dr. Basant Kumar Das Rajasekaran N, Dr. Kirti Sahu, Dhanapal M, Dr R Ashok Kumar, Prof. Vivek Singh Kushwah, Dr. Mahesh Dhonde | management features | | | |
| 7. | Dr. S.K. Lanjhiyana, Dr. Sweety Lanjhiyana, Purnima Rai, Dr. Zulfa Nooreen, Shubham Tripathi, Sonali Singh, Princee Kesarwani, B. Sathiyaprasad, Prof.Vivek Singh Kushwah, Dr. Sajal Kumar Jha, Dr. Deepak Sharma, Dr. Manish Jaimini | A System for Diagnosis and Classification of Bone Cancer using Artificial Intelligence | 202221046050 12/08/2022 | Process | Published 09/09/2022 |
| 8. | Dr Surendra Kumar Yadav, Logeshwari Dhavamani, Dr Sumanta Bhattacharya, Chhavi Sharma, Dr. Droupti Yadav, Neha Gardg, Harshita Chaurasiya, Dr. Hukma Ram, Ravi Sharma, Prof. Vivek Singh Kushwah, Dr. A.Sasi Kumar, Dr P Joel Josephson | Systematic Approach Integrated With Convolutional Neural Network For Predicting the Air Pollution and Air Pollutants in Industrial Area | 202211059592 18/10/2022 | Process | Published 04/11/2022 |
| 9. | Ms.Putta Hemalatha, Dr. T. Arun Kumar, | Artificial Intelligence Based Approach to Early Prediction of Natural Coma Based on Brain | 202241065536 15/11/2022 | Process | Published 02/12/2022 |

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| | Dr. Vanisree Ramanathan, Sachin Sharma, Dr. Sankar K, Mr. Ladi Alik Kumar, Dr. Sushil Kumar, Dr. Mousmita Devi, Dr. P. Arulprakash, Prof. Vivek Singh Kushwah, Dr. Kogila Palanimuthu, Dr Yogesh Arun Pund | Mapping | | | |
| 10. | Dr.S.Ramasamy, Dr M.S.V.K.V.Prasad, Ashwini Bhalchandra Phokmare, Dr Atul Dnyaneshwar Bobdey Dr Sharyu Vasantrao Ghonmode, Dr. Pravin Chandrakant Singru, Pranita P Belkhode, Prof Dr.Vivek Singh Kushwah, Dr. Ravindra D Nalawade, Dr Sumit Kumar Gupta Dr.Subhash Chander, Dr Pratibha Mishra | Smart IoT Based System Integrated with Artificial Intelligence Framework for Prediction of Air and Water Pollution | 202241065330 15/11/2022 | Process | Published 25/11/2022 |
| 11. | Manoj Kumar Kushwaha, Dr.E. Maheshwari, K Gayathri, Hans J Dcruz, Sanjay, Pankaj, V. Ravi, Ritesh Kumar, Vivek Singh Kushwah, Ankit Neupane | Implementation of Framework to Study the Battery Backup and Various Advantages of Bidirectional Electric Vehicle Charging Points | 202211067243 23/11/2022 | Process | Published 09/12/2022 |
| 12. | Dr N Srinivasan Arunsankar, Yashpal, | Implementation of Novel Techniques to Measure the Efficiency Photovoltaics of Nanostructured | 202241073253 17/12/2022 | Process | Published 06/01/2023 |

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| | Sonal Prakash Tatte, Uma Yadav, Shaikh Sameer Rafik,G.Nageswara Rao, Dr.Surinder Paul, Thayalara J Christopher Jeyakumar, T.Meenakshi, Vivek Singh Kushwah, S.Gopinath, Dr Jyoti Prasad Patra | Solar Cells | | | |
| 13. | Jangili Srinivasa Rao, Dr. Setturu Bharath, Vijay Dattatray Chaudhari, Dr. Rais Abdul Hamid Khan Mr. Thamra J Narendra Ghorsad, Vinay Yadav Dr. Pawan K Sharma Prof.Vivek Singh Kushwah, Dr. Neera J Kumar, Dr.A.Sasi Kumar Amar Pal Yadav, Mohd Asif Shah | Novel approach to identify the security issues in internet of things (IoT) and cloud computing service model with suggested solution | 202241073382 18/12/2023 | Process | Published 06/01/2023 |
| 14. | Dr. Prasant Singh Yadav Vivek Kumar Srivastav Dr. Ra Jeev Kumar, Dr. Priyanka Singh, Ravi Pal, Mr. Mayank Chauhan, Dr.Ramu Kuchipudi, Dr. Pasupuleti Subrahmanya Ranjit, Prof. Vivek Singh Kushwah, Dr. V Saravanan, Dr.A.Sasi Kumar, Dr. Vijay Kumar Salvia | Deep Reinforcement Learning based on Path planning and Tracking control of Automatic Parking Cloud Model | 202211073449 19/12/2022 | Process | Published 13/01/2023 |

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| 15. | B. Kezia Rani, Dr. P. John Paul, Dr.V.Anitha Prof. Ashwini Raipure, Ra Jesh Kumar A, Sumita Kumar, Dr. Pawan K Sharma, Mallikarjuna Rao Gundavarapu Prof. Vivek Singh Kushwah, Dr.A.Sasi Kumar | Implementation of Machine Learning Techniques for Attack and Anomaly Detection in Internet of Things (IoT) Sensors and Sites | 202241073450 19/12/2022 | Process | Published 06/01/2023 |
| 16. | Mohammed Mueen Pasha M,Vijay Dattatray Chaudhari, K Gowthami, Dr. Anil Janardhan Patil, Dr. Dhammanandjagadeo Shirale, Shatabdi Madhav Bhalerao, Hemalata Arun Gosavi Satyam Dubey, A. Suresh Kumar, Ritesh Nagar, Prof. Vivek Singh Kushwah, Dr. Shally Goyal | Deep learning-based technique for Automatic Traffic Anomaly Detection on the Road Network | 202241075373 23/12/2022 | Process | Published 27/01/2023 |
| 17. | D.Shekar Goud, Bholey Nath Prasad, Smt.N.Vana Jakshi, Sathish Kumar R, Dr Gurjot Singh, Ramakrishnan P, Nitin Kumar Suyan, Dr Rinkoo Bhatia, Dr. Amar Kumar Dey, Mohd Asif Shah, Dr. Vivek Singh Kushwah, Dr.A.Sasi Kumar | Design of Framework for an Efficient Radio Frequency Spectrum Utilization Technique for Cognitive Radio Networks | 202341001687 09/01/2023 | Process | Published 27/01/2023 |

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| 18. | Dr. Syed Ali Gulab Jan, K.R. Kannan, Dr.D. Suganthi, Souvik Sen, Dr Shahaji Shivaji Chandanshive, Chtakunta Praveen Kumar, Dr. Kamepalli Sujatha, Dr. G. Vallathan Dr.A. Sasi Kumar, Prof. Vivek Singh Kushwah | Systematic Techniques to Study the Impact of Novel Approaches in Brain Tumor Therapy | 202331033540 12/05/2023 | Process | Published 19/05/2023 |
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|-------------|------------------------------------|---|---------------------------------|-------------------------|--------------------------------------|
| 1. | Dr. D. Nagadevi | Secure online transactions through image processing and face recognition techniques | 202241004917 28/01/2022 | Process | Published 04-02-2022 |
| 2. | Dr. D Krishna Reddy Dr. K Suman | Noise Adaptive Approach For Improving the Bit Error Rate (BER) in three dimensional Turbo Codes | 202241026206 05/05/2022 | Process | Published 20-05-2022 |