

Patents Granted or Published 2023-24

SL NO	Patent Application No.	Inventors Name	Title of the Patent	Patent File Date	Patent Published/Grant Date
1	202441062450	Dr. Subir Gupta; Papri Ghosii; Joyjit Patra; Aratrika Banekjee; Arpan Ghosh; Susanta Banerjee; Amrita Sarkar ; Asis Kumar Bhunia; Jayashri Deb Sinha; Pratik Halder; Sukanta Kundu; Priyonko Das	Autonomous Robotic System for High- Precision Metal Detection with Integrated GPS Mapping and Real-Time Monitoring	19/08/2024	
2	459524-001	Dr. Subir Gupta; Ms Joyita Ghosh; Mr. Somdeb Mondal; Dr. Shefali Varshney; Mrs. Upasana Adhikari; Mr. Dipankar Roy; Mr. Soumojit Roy; Mr. Bidisha Maiti; Mr. Sougata Sikdar ; Mrs. Pinky Pramanik; Subhabrata Barman; Dr. K. Indhumathi	IoT-Driven Wearable Solution For Gang Safety And Protection	20/05/2025	
3	202331076967	Dr. Subir Gupta; Papri Ghosii; Joyjit Patra; Aratrika Banekjee; Arpan Ghosh; Susanta Banerjee; Amrita Sarkar ; Asis Kumar Bhunia; Jayashri Deb Sinha; Pratik Halder; Sukanta Kundu; Priyonko Das	Autonomous Robotic System for High- Precision Metal Detection with Integrated GPS Mapping and Real-Time Monitoring	19/08/2024	30/08/2024
4	202531004729	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai; Sougata Sikdar; Rajrupa Metia; Dr. Moumita Das; Palash Ray; Amrita Sarkar ; S. K. Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm for Biometrics	21/01/2025	31/01/2025
5	202531020725	Dr. Debasis Maji; Dr. Sunanda Hazra; Dr. Dilip Dey; Dr. Palash Pal; Mrs. Alpana Barman; Mr. Goutam Das; Mr. Sourav Kumar Das; Dr. Pratyay Konar; Mr. Saubhik Maulik; Mrs. Angana Chakraborty	Real-Time Diabetic Retinopathy Detection System Using Deep Learning	07/03/2025	04/04/2025
6	202441062450	Dr. Subir Gupta; Papri Ghosh; Joyjit Patra; Aratrika Banerjee; Arpan Ghosh ; Susanta Banerjee; Amrita Sarkar; Asis Kumar Bhunia; Jayashri Deb Sinha; Pratik Halder; Sukanta Kundu; Priyanka Das	Autonomous Robotic System for High- Precision Metal Detection with Integrated GPS Mapping and Real-Time Data Transmission	19/08/2024	26/08/2024
7	202441062449	Dr. Subir Gupta; Pinki Pramanik; Upasana Adhikari P; Abhik Choudhary; Shefali Varshney; Arpan Ghosh ; Susanta Banerjee; Kamaluddin Mandal; Dipankar Roy; Priyonko Das	Futuristic Smart Wheelchar: AI-Controlled Mobility with Smartphone Integration for Enhanced Accessibility	19/08/2024	30/08/2024

8	202421072283	Priti Ashok Jain; Dr. Rohit Singh; Dr. Aditya Ghosh; Shreedevi P; Arpan Ghosh ; Reshmi Maulik; Dr. Seema Sahai; Tamosa Chakraborty; Nitasha Barara	An Integrated Machine Learning, IoT, and Data Analytics System For Autonomous Control and Cybersecurity	25/09/2024	01/11/2024
9	202531004726 A	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman ; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr Sumanta Kuila; Sougata Sikdar; Tapas Saha; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform In A Grid Computing Environment	31/01/2025	
10	202531004729 A	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai; Sougata Sikdar; Rajrupa Metia; Dr. Moumita Das; Palash Ray; Amrita Sarkar; S K Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm For Biometrics	31/01/2025	
11	202431062859	Dr. Jayeeta Majumder	A System and Method for Real-Time Patient Monitoring and Analysis Using Wireless Sensor	20/08/2024	30/08/2024
12	202431062860	Dr. Jayeta Majumder; Saikat Khanra; Dr. Mihir Baran Bera; Subhabrata Barman; Dr. Moumita Das ; Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Pinaki Pratim Acharjya	A Method for Enhanced Image Steganography with Pixel Value Differencing and Neural Network-Optimized Data	20/08/2024	30/08/2024
13	202431062861	Dr. Jayeeta Majumder	A system and Method for Adaptive Management of Disconnected Nodes in Wireless Sensor	20/08/2024	30/08/2024
14	202431063087	Dr. Jayeeta Majumder	Swarm Intelligence Based Probabilistic Congestion Control and Path Selection in Mobile Ad Hoc	21/08/2024	30/08/2024
15	202531004715	Dr. Jayeeta Majumder	An Enhanced Image Segmentation Method and System for Gray Scales Using Statistical moments in Watershed Transformations	21/01/2025	31/01/2025
16	202531004726	Dr. Pinaki Pratim Acharjya; Mrs. Mahuya Sasmal	An Enhanced Image Segmentation Method Using Watershed Transform In a Grid Computing Environment	21/01/2025	31/01/2025

17	202431062859	Dr. Moumita Das ; Dr. Subhankar Joardar; Dr. Jayeeta Majumder; Subhabrata Barman; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Pinaki Pratim Acharjya	A System and Method for Real-Time Patient Monitoring and Analysis Using Wireless Sensor	20/08/2024	30/08/2024
18	202431062860	Dr. Jayeta Majumder; Saikat Khanra; Dr. Mihir Baran Bera; Subhabrata Barman; Dr. Moumita Das ; Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Pinaki Pratim Acharjya	A Method for Enhanced Image Steganography with Pixel Value Differencing and Neural Network Optimized Data Compression	20/08/2024	30/08/2024
19	202431062859	Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Jayeeta Majumder; Subhabrata Barman; Dr. Moumita Das ; Saikat Khanra; Dr. Pinaki Pratim Acharjya	Swarm Intelligence Based Probabilistic congestion control and Path Selection in Mobile Ad hoc Networks	20/08/2024	30/08/2024
20	202431062859	Jayashri Deb Sinha; Dr. Jayeeta Majumder; Dr. Moumita Das ; Dr. Mihir Baran Bera; Dr. Subhankar Joardar; Subhabrata Barman; Dr. Pinaki Pratim Acharjya	A System and Method for Adaptive Management of Disconnected Nodes in Wireless Sensor Network	20/08/2024	30/08/2024
21	202531004726	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das ; Rajrupa Metia; Dr. Sumanta Kuila; Sougata Sikder; Tapas Saha; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform In a Grid Computing Environment	21/01/2025	31/01/2025
22	202531004729	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai; Sougata Sikder; Rajrupa Metia; Dr. Moumita Das ; Palash roy; Amrita Sarkar; S K Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm For Biometric	21/01/2025	31/01/2025
23	202431063259 A	Dr. Santanu Koley; Jayasri Deb Sinha; Dr. Raja Rawat; Dr. Mrinmoy Sen ; Dr. Deep Suman Dev; Sunanda Jana; Dr. Dipankar Dutta; Aratrika Banerjee; Mamani Bandyopadhyay; Hidam Bandyopadhyay	A Decentralized Cloud Storage System With Blockchain and Quantum Resistant Encryption for Enhanced Data Security	21/08/2024	30/08/2024
24	202531004729	Dr. Pinaki Pratim Acharjya; Palash Ray	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm for Biometrics	21/01/2025	31/01/2025
25	202431059143 A(19)	Dr. Santanu Koley; Patrali Pradhan	A Method for Dynamic Optimization of Rural Healthcare Applications Using Machine Learning and Mathematical Models	05/08/2024	23/08/2024

26	202531004715	Dr. Pinaki Pratim Acharjya; Dr. Mihir Baran Bera; Dr. Biplab Sinha Mahapatra; Dr. Manoj Kumar Mondal; Dr. Jayeeta Majumder; Aratrika Banerjee; Arpita Shome; Susanta Banerjee; Sudip	An Enhanced Image Segmentation Method and System for Grayscale Using Statistical Moments In Watershed Transformations	21/01/2025	31/01/2025
27	202531004722	Dr. Pinaki Pratim Acharjya; Susanta Banerjee; Arpita Shome; Aratrika Banerjee; Sudip Mishra; Dr. Manoj Kumar Mondal; Dr. Biplab Sinha Mahapatra;	A Hybrid Method for Edge Detection In Image Processing Systems Using Gradient And Laplacian Operators	21/01/2025	31/01/2025
28	202531004726	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr. Sumanta Kuila; Sougata Sikdar; Tapas Saha; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform in a Grid Computing Environment	21/01/2025	31/01/2025
29	202531004729	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai; Sougata Sikdar; Rajrupa Metia; Dr. Moumita Das; Palash Ray; Amrita Sarkar; S K Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm for Biometrics	21/01/2025	31/01/2025
30	202431062859	Dr. Moumita Das; Dr. Subhankar Joardar; Dr. Jayeeta Majumder; Subhabrata Barman; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Pinaki Pratim Acharjya	Healthcare Monitoring system in Medical Field using Wireless Sensor Networks	22/08/2024	30/08/2024
31	202431062860	Dr. Jayeeta Majumder; Saikat Khanra; Dr. Mihir Baran Bera; Subhabrata Barman; Dr. Moumita Das; Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Pinaki Pratim Acharjya	High-Capacity Image Steganography	20/08/2024	30/08/2024
32	202431062861	Jayashri Deb Sinha; Dr. Jayeeta Majumder; Dr. Moumita Das; Dr. Mihir Baran Bera; Dr. Subhankar Joardar; Subhabrata Barman; Dr. Pinaki Pratim Acharjya	Analysis on Disconnected Nodes in Wireless Sensor Networks	20/08/2024	30/08/2024
33	202431063080	Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Jayeeta Majumder; Subhabrata Barman; Dr. Moumita Das; Saikat Khanra; Dr. Pinaki Pratim Acharjya	A Swarm Inspired Multipath Data Transmission	20/08/2024	30/08/2024
34	2024/02361	Dr. Santanu Koley; Rajrupa Metia; Rajesh Mukherjee; Dr. Bidesh Chakraborty; Dr. Deepa Naik; Sonal Sameer Bawankule; Dr. Chiranjib Chakravarty; Dr.	A Cloud Computing System For Extended Battery Life And Enhanced Performance	25/03/2024	30/10/2024

35	435994-001	Dr. Santanu Koley; Mrs. Rajrupa Metia ; Mrs. Debrupa Metia; Mrs. Razia Sultana	Machine Learning-Enabled Network Security Device With Adaptive Threat Detection	29/10/2024	
36	202531004726 A	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr. Sumanta Kuila; Sougata Sikdar; Tapas Saha; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform In A Grid Computing Environment	31/01/2025	
37	202531004729 A	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai ; Sougata Sikdar; Rajrupa Metia; Dr. Moumita Das; Palash Ray; Amrita Sarkar; S K Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm For Biometrics	31/01/2025	
38	202431063259 A	Dr. Santanu Koley ; Jayasri Deb Sinha; Dr. Raja Rawat; Dr. Mrinmoy Sen; Dr. Deep Suman Dev; Sunanda Jana; Dr. Dipankar Dutta; Aratrika Banerjee; Mamani Bandyopadhyay; Hidam Rameswar Sing	A Decentralized Cloud Storage System With Blockchain and Quantum Resistant Encryption for Enhanced Data Security	21/08/2024	30/08/2024
39	202431059143 A(19)	Dr. Santanu Koley ; Patrali Pradhan	A Method for Dynamic Optimization of Rural Healthcare Applications Using Machine Learning and Mathematical Models	05/08/2024	23/08/2024
40	435994-001	Dr. Santanu Koley ; Mrs. Rajrupa Metia; Mrs. Debrupa Metia; Mrs. Razia Sultana	Machine Learning-Enabled Network Security Device With Adaptive Threat Detection	29/10/2024	
41	2024/02361	Dr. Santanu Koley ; Rajrupa Metia; Rajesh Mukherjee; Dr. Bidesh Chakraborty; Dr. Deepa Naik; Sonal Sameer Bawankule; Dr. Chiranjib Chakravartty; Dr. Durga Prasad Sharma; Dr. Manojit Bhattacharya; Patrali Pradhan	A Cloud Computing System For Extended Battery Life And Enhanced Performance	25/03/2024	30/10/2024
42	202531004726	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr. Sumanta Kuila; Sougata Sikdar ; Tapas Saha; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform in a Grid Computing Environment	21/01/2025	31/01/2025
43	202531004729	Dr. Pinaki Pratim Acharjya; Ramsundar Ghorai; Sougata Sikdar ; Rajrupa Metia; Dr. Moumita Das; Palash Ray; Amrita Sarkar; S K Hojayfa Rahaman	An Enhanced Fingerprint Segmentation Method Using Watershed Algorithm for Biometrics	21/01/2025	31/01/2025

44	202431062859	Dr. Moumita Das; Dr. Subhankar Joardar; Dr. Jayeeta Majumder; Subhabrata Barman ; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Pinaki Pratim Acharjya	Healthcare Monitoring system in Medical Field using Wireless Sensor Networks	22/08/2024	30/08/2024
45	202431062860	Dr. Jayeeta Majumder; Saikat Khanra; Dr. Mihir Baran Bera; Subhabrata Barman ; Dr. Moumita Das; Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Pinaki Pratim Acharjya	High Capacity Image Steganography	22/08/2024	30/08/2024
46	202431062861	Jayashri Deb Sinha; Dr. Jayeeta Majumder; Dr. Moumita Das; Dr. Mihir Baran Bera; Dr. Subhankar Joardar; Subhabrata Barman ; Dr. Pinaki Pratim Acharjya	Analysis on Disconnected Nodes in Wireless Sensor Networks	22/08/2024	30/08/2024
47	202431063080	Dr. Subhankar Joardar; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Jayeeta Majumder; Subhabrata Barman ; Dr. Moumita Das; Saikat Khanra; Dr. Pinaki Pratim Acharjya	A Swarm Inspired Multipath Data Transmission	22/08/2024	30/08/2024
48	202431062859	Dr. Moumita Das; Dr. Subhankar Joardar ; Dr. Jayeeta Majumder; Subhabrata Barman; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Pinaki Pratim Acharjya	A System and Method for Real-Time Patient Monitoring and Analysis Using Wireless Sensor Networks	22/08/2024	30/08/2024
49	202431062860	Dr. Jayeeta Majumder; Saikat Khanra; Dr. Mihir Baran Bera; Subhabrata Barman; Dr. Moumita Das; Dr. Subhankar Joardar ; Jayashri Deb Sinha; Dr. Pinaki Pratim Acharjya	High Capacity Image Steganography	22/08/2024	30/08/2024
50	202431062861	Jayashri Deb Sinha; Dr. Jayeeta Majumder; Dr. Moumita Das; Dr. Mihir Baran Bera; Dr. Subhankar Joardar ; Subhabrata Barman; Dr. Pinaki Pratim Acharjya	Analysis on Disconnected Nodes in Wireless Sensor Networks	22/08/2024	30/08/2024
51	202431063080	Dr. Subhankar Joardar ; Jayashri Deb Sinha; Dr. Mihir Baran Bera; Dr. Jayeeta Majumder; Subhabrata Barman; Dr. Moumita Das; Saikat Khanra; Dr. Pinaki Pratim Acharjya	A Swarm Inspired Multipath Data Transmission	22/08/2024	30/08/2024
52	202531004726	Dr. Pinaki Pratim Acharjya; S. K. Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr. Sumanta Kuila ; Sougata Sikdar; Tapas Saha; Pamsundar Choudhary	An Enhanced Image Segmentation Method Using Watershed Transform in a Grid Computing Environment	21/01/2025	31/01/2025

53	202431063259A	Dr. Santanu Koley; Jayasri Deb Sinha; Dr. Raja Rawat; Dr. Mrinmoy Sen; Dr. Deep Suman Dev; Sunanda Jana ; Dr. Dipankar Dutta; Aratrika Banerjee; Mamani Bandyopadhyay; Hidam Rameswar Sing	A Decentralized Cloud Storage System With Blockchain and Quantum Resistant Encryption for Enhanced Data Security	21/08/2024	30/08/2024
54	202331076967	Dr. Pinaki Pratim Acharjya; S K Hojayfa Rahaman; Mahuya Sasmal; Dr. Moumita Das; Rajrupa Metia; Dr. Sumanta Kuila; Sougata Sikdar; Tapas Saha ; Ramsundar Ghorai	An Enhanced Image Segmentation Method Using Watershed Transform In A Grid Computing Environment	21/01/2025	31/01/2025
55	202531004722	Dr. Pinaki Pratim Acharjya; Susanta Banerjee; Aprita Shome; Aratrika Banerjee; Sudip Mishra; Dr. Manoj Kumar Mondal; Dr. Biplab Sinha Mahapatra; Umesh Pal ; Dr. Mihir Baran Bera	A Hybrid Method for Edge Detection in Image Processing Systems Using Gradient and Laplacian Operators	21/01/2025	31/01/2025
56	435995-001	Dr. Jayeeta Majumder	Portable Machine Learning Based Heart Health Monitoring Device		29/10/2024
57	435995-001	Dr. Santanu Koley, Dr. Jayeeta Majumder, Dr. Moumita Das , Dr. Arindam Giri, Dr. Nabanita Das, Dr. Sudipta Bahttacharya, Patrali Pradhan, Abhijit Debnath, Dr. Kisalaya Chakraborti, Dr. Krishna Choudhary	Portable Machine Learning Based Heart Health Monitoring Device	29.10.2024	21.02.2025
58	6431510	Dr. Santanu Koley, Dr. Mrinmoy Sen , Sunanda Jana, Dr. Vijaya Choudhary, Dr. Chiranjib Chakravartty, Dr. Poruran Sivakumar, Dr. Arpita Das, Dr. Sk. Sahnawaz, Dr. Apratim Mitra, Rajrupa Metia	Sleek Artificial Intelligence Computing USB Stick		04.04.2025
59	435995-001	Dr. Santanu Koley, Patrali Pradhan	Portable Machine-Based Health Monitoring Device	29/10/2024	21.02.2025
60	2024/02361	Dr. Santanu Koley , Rajrupa Metia, Rajesh Mukherjee , Dr. Bidesh Chakraborty, Dr. Deepa Naik, Sonal Sameer Bawankule, Dr. Chiranjib Chakravartty, Dr. Durga Prasad Sharma, Dr. Manojit Bhattacharya, Patrali Pradhan	A Cloud Computing System For Extended Battery Life And Enhanced Performance	25/03/2024	30/10/2024

61	435995-001	Dr. Santanu Koley , Dr. Jayeeta Majumder, Dr. Moumita Das, Dr. Arindam Giri, Dr. Nabanita Das, Dr. Sudipta Bahattacharya, Patrali Pradhan, Abhijit Debnath, Dr. Kisalaya Chakraborti, Dr. Krishna	Portable Machine Learning Based Heart Health Monitoring Device	29.10.2024	21.02.2025
62	6431510	Dr. Santanu Koley , Dr. Mrinmoy Sen, Sunanda Jana, Dr. Vijaya Choudhary, Dr. Chiranjib Chakravarty, Dr. Poruran Sivakumar, Dr. Arpita Das, Dr. Sk. Sahnawaz, Dr. Apratim Mitra,	Sleek Artificial Intelligence Computing USB Stick		04.04.2025
63	6421619	Dr. Santanu Koley , Umesh Pal, Dr. Surekha lanka, Dr. Parijat Bhowmick, Dr. Sutapa Chatterjee Sarkar, Dr. Abhishek Roy, Dr. Deepa Naik, Janardhan Reddy Timmareddy, Dr. Atanu Nag, Debika Chaudhuri.	Interactive Multi-way Touchscreen Table for Classroom Learning		10/02/2025
64	2024/02361	Dr. Santanu Koley , Rajrupa Metia, Rajesh Mukherjee , Dr. Bidesh Chakraborty, Dr. Deepa Naik, Sonal Sameer Bawankule, Dr. Chiranjib Chakravarty, Dr. Durga Prasad Sharma, Dr. Manojit Bhattacharya, Patrali Pradhan	A Cloud Computing System For Extended Battery Life And Enhanced Performance	25/03/2024	30/10/2024
65	6431510	Dr. Santanu Koley, Dr. Mrinmoy Sen, Sunanda Jana , Dr. Vijaya Choudhary , Dr. Chiranjib Chakravarty, Dr. Poruran Sivakumar, Dr. Arpita Das, Dr. Sk Sahnawaj, Dr. Apratim Mitra , Rajrupa Metia	Sleek Artificial Intelligence Computing USB Stick		04 April 2025
66	6421619	Dr. Santanu Koley , Umesh Pal, Dr. Surekha lanka, Dr. Parijat Bhowmick, Dr. Sutapa Chatterjee Sarkar, Dr. Abhishek Roy, Dr. Deepa Naik, Janardhan Reddy Timmareddy, Dr. Atanu Nag, Debika Chaudhuri.	Interactive Multi-way Touchscreen Table for Classroom Learning		10/02/2025