

Department of CSE(AI&ML)

Patents

Sl. No	Name of the Faculty/Student	Title of Patent	Patent	Published Year-Date	Application Number	Link
1	1) M. Lakshmanan 2) Sriramkumar R 3) Jayavrinda V 4) Joshuva Arockia Dhanraj 5) Mude Nagarjuna Naik	System and Method for Dual-Site Multimodal Workplace Wellness Monitoring	Patent	16/01/2026	Application No: 202541131916 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
2	1. Lakshmanan M 2. Sriramkumar R 3. Jayavrinda V 4. Joshuva Arockia Dhanraj 5. Vinutha N 6. Vegi Fernando A 7. Arunkumar Gopu 8. Pradeep Kumar K 9. Mude Nagarjuna Naik 10. Mithaguru	Portable Diagnostic Kit for Offline Imaging and Early Detection of Lung and Chest Diseases in Remote and Low-Resource Regions	Patent	02/06/2026	Application No: 202541126538 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
3	Sriramkumar R, M. Lakshmanan, Jayavrinda V. Vadakkeparambil, Joshuva Arockia Dhanraj, Godhandaraman T, Mithaguru, Sugandha Saxena, and Trupthi Rao	Method and System for Autonomous Multi-Modal Distress Detection and Secure Forensic Evidence Generation	Patent	20-Mar-26	Application Number: 202641006307 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
4	Sriramkumar R, M. Lakshmanan, Jayavrinda V. Vadakkeparambil, Joshuva Arockia Dhanraj, Gowdham C, Pradeep Kumar K, A. Vegi Fernando, Mithaguru, Godhandaraman T, and Srinidhi Kuna	Advanced Rail–Road Collision Prevention and Disaster-Aware Transport Safety Network	Patent	20-Mar-26	Application Number: 202641008198 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
5	Sriramkumar R, M. Lakshmanan, Jayavrinda V. Vadakkeparambil, Joshuva Arockia Dhanraj, Gowdham C, Mude Nagarjuna Naik, A. Vegi Fernando, Vinutha N, and Abdul Haq Nalband	Multimodal Non-Contact Pediatric Health Screening and Early-Alert System	Patent	20-Mar-26	Application Number: 202641008200 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent

6	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Godhandaraman T, Dr. Sugandha Saxena, Dr. Jayavrinda V Vadakkeparambil, Prof. Pradeep Kumar K	Adaptive Soft-Robotic ExoSleeve with Multimodal Biofeedback, Neuro-Muscular Digital Twin, and Learning-Based Personalized Rehabilitation Control	Patent	20-Mar-26	Application Number: 202641012362 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
7	Hanumanth Sastry Sistla Jayavrinda V Vadakkeparambil Bahubali Shiragapur Senthil Kumar Angappan Gopal Das M Lakshmanan Abdul Haq Nalband Joshuva Arockia Dhanraj Sriramkumar R	Biomarkers and Generative Inference-based Precision Psychiatry System and Method Thereof	Patent	20-Mar-26	Application No.: 202641025843 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
8	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Trupthi Rao, Prof. Godhandaraman T, Prof. Pradeep Kumar K, Prof. Souvik Ghosh	A Self-Optimizing Mechatronic Actuation and Control System with Multi-Sensor Fusion and Self-Healing Mechanisms	Patent	20-Mar-26	Application Number: 202641012361 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
9	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Dr. Jayavrinda V Vadakkeparambil, Prof. Godhandaraman T, Dr. Sugandha Saxena, Dr. Mude Nagarjuna Naik	Hybrid Edge-Integrated Digital Twin-Based Multimodal Physiological Health Monitoring and Predictive Risk Assessment System and Method Thereof	Patent	20-Mar-26	Application Number: 202641015887 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
10	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Pradeep Kumar K, Dr. Jayavrinda V Vadakkeparambil, Prof. Godhandaraman T, Dr. Abdul Haq Nalband, Prof. Trupthi Rao, Dr. Sugandha Saxena	Autonomous Multi-Terrain Interplanetary Explorer with Reconfigurable Wheel-Leg Mobility	Patent	20-Mar-26	Application Number: 202641015413 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
11	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Trupthi Rao, Prof. Godhandaraman T, Prof. K Pradeep Kumar, Dr. Abdul Haq Nalband	A Swarm-Intelligence-Based Autonomous Robotic Ecosystem for Predictive Maintenance and Adaptive Self-Repair of Space Infrastructure	Patent	20-Mar-26	Application Number: 202641006308 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent

12	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Godhandaraman T, Dr. Sugandha Saxena, Dr. Jayavrinda V Vadakkeparambil, Prof. Prof. Mithaguru	System and Method for Predicting and Preventing Hospital-Acquired Infections Using Digital Twin	Patent	20-Mar-26	Application Number: 202641015888 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
13	Dr. Joshuva Arockia Dhanraj, Prof. Bhavya Lingampalli, Dr. M. Lakshmanan, Prof. Sriramkumar R, Prof. Pradeep Kumar K, Dr. Jayavrinda V Vadakkeparambil, Prof. Godhandaraman T, Dr. Abdul Haq Nalband, Prof Trupthi Rao, Dr. Sugandha Saxena	System and Method for Adaptive Healthcare Robotics Using Reinforcement Learning, Multimodal Physiological Sensing, and Digital-Twin-Validated Intervention	Patent	20-Mar-26	Application Number: 202641015411 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
14	Hariharan S Mahalakshmi P Dr. M Lakshmanan	Multilevel Group-Synchronized Health Diagnostic System	Patent	20/03/2026	Application No.202641015412 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
15	Godhandaraman T Senthil Kumar Angappan Shaila S G M Lakshmanan Joshuva Arockia Dhanraj Gowdham C Sriramkumar R U Pavan Kumar A Vegi Fernando Mithaguru	Autonomous Multimodal Intelligence System with Cross-Modal Attention and Bio-Physiological Root-Zone Digital Twin for Real-Time Rice Yield and Grain Quality Optimization	Patent	20/03/2026	Application No.202641008201 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
16	Godhandaraman T Senthil Kumar Angappan Shaila S G M Lakshmanan Joshuva Arockia Dhanraj Gowdham C Sriramkumar R U Pavan Kumar A Vegi Fernando Mithaguru	A Pattern-Driven Deep Learning Time-Optimized Crop Yield Prediction System	Patent	20/03/2026	Application No.202641012363 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
17	Dr Sathya Guruprasad Sai Bhavani Visarapu Nirmala, Prof. Pradeep Kumar K Dr Jayavrinda Vrindavanam	EAR-WORN SENSOR FOR GAIT MONITORING	Patent	3-Jun-26	Application No.202441067026 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
18	Suresh Kandasamy	System For Hardware-Enforced Telemetry Assurance And Evidence-Linked Explainable Operational Intelligence In Agile-DevOps Environments	Patent	13/03/2026	Application No.202621008211 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent

19	1)M Lakshmanan 2)Sriramkumar R 3)Jayavrinda V Vaddakeparambil 4)Joshuva Arockia Dhanraj 5)Mude Nagarjuna Naik 6)Gowdham C 7)Abdul Haq N 8)Trupthi Rao	System and Method for Multimodal Dual-Location Elder Health Diagnostics for Passive Early Detection of Systemic and Respiratory Illness	Patent	20/03/2026	Application No.202641003223 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
20	Hanumanth Sastry Sistla	Generative ai platform for real-time cardiac clinical decision support and procedural guidance using smart interventional glasses	Patent	17-04-2026	Application No: 202641041350	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
21	Sumant Kumar Mohapatra,Biswa Mohan Sahoo , Jayavrinda V Vadakkeparambil , Govind Kumar Pandey	AI-Driven Adaptive Microbial Consortium with Intelligent Encapsulation for Enhancing Crop Resilience Under Drought and Heat Stress	Patent	1/5/2026	202641048661	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
22	Suresh Kandasamy, Dr. Suresh Arumugam	AgileOps Agentic Framework (AAF): A Multi-Agent and LLM-Driven Governance System for Operational Visibility in Agile-DevOps Ecosystems	Patent	5/6/2026	202641067942 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
23	Dr. M. Manikandan Dr. M. Lakshmanan Dr. Sriramkumar R Dr. Jayavrinda V. Vadakkeparambil Dr. Joshuva Arockia Dhanraj Dr. A. Vegi Fernando Dr. Mithaguru Dr. Souramita Bhowmik Dr. Ankita Thakkar Himmatlal Dr. Ripunjay Mahendra Pratap Jaiswar Dr. Shivnandan Rai	System and Method for Dynamic Foot Morphology Assessment and Real-Time Volumetric Deformation Prediction using Optical-Haptic Fusion	Patent	24-Jul-26	202641082498 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
24	1)M Lakshmanan 2)Sriramkumar R 3)Jayavrinda V Vadakkeparambil 4)Joshuva Arockia Dhanraj 5)Manikandan Moovendran 6)Ankita Thakkar Himmatlal	A System and Method for Passive Dual-State Machine-Readable Optical Authentication Using Selectively Embedded Photochromic Modules	Patent	31/07/2026	Application No.202641087960 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent
25	Prof. Ajith Kumar B	Digital Twin Based Cyber Attack Prediction Framework	Patent	31-Jul-26	Application No.: 202641088643 A	https://search.ipindia.gov.in/IPOJourn/Journal/Patent