



## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

L.B.Reddy Nagar, Mylavaram – 521 230, NTR District, Andhra Pradesh, INDIA.  
Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada.  
Accredited by NAAC with “A” Grade and NBA Tier-1 for ASE, CE, CSE, IT, ECE, EEE & ME.  
An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution.

### Research & Development Cell

Date: 12-10-2023

### Details of Patents for the Academic Year 2022-23

AI&DS: 3, ASE: 1, CE:0, CSE: 1, ECE: 8, EEE: 1+5, ME: 19, IT: 4, FED:0, MBA: 3 Total: 45

Sl.	Patent Title	Applicants/ Inventors	Patent No.	Filed Date	Published Date
<b>Granted Category - 01</b>			<b>EEE-01</b>		
1.	A Method of Preventing Malfunction and Distant Relay due to Power Swing in Multi-Machine Systems	<b>Dr. M. Uma Vani</b> Dr. M. Ramamoorthy	1356/CHE/2011  <b>Grant Ref. No.:</b> 420972	Date of Pub.: 26/10/2012	08/02/2023 <b>Granted Indian Patent</b>
<b>Patents under Published Category - 42</b>					
<b>AI &amp; DS-03</b>					
2.	Design and Prototyping of Quadra Parallel Manipulator with Endoscope End Position MEMS Accelerometer Based Control mechanism	Mr. Kalyan Dusarlapudi Dr. K Narasimha Raju <b>MrKattupalli Sudhakar</b> MrTiruvuri Charan Sai MrSankurathri Lokesh Babu MrPolasi Venkata Satya Kireeti Mr. Sumit Kumar Behera	202241037534	30/06/2022	08/07/2022
3.	Solar powered camera based kit for lead ions detection in water employing H <sub>2</sub> S gas	Dr. Rohit Pandey Dr S Suyambazhahan Dr. Shekaina Justin Dr. M. Sreenivasan <b>Kattupalli Sudhakar</b> Dr. B. Varun Kumar N.Ahamed Hussain Asif R. Jegadeesh Kumar S.Sivarajan Purushottam Balaso Pawar	202321025271	03/04/2023	05/05/2023

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4.	Design and evaluation of an IoT system's machine learning security framework	Dr. Nandam Gayatri Dr.Venkata N Inukollu Narender Chinthamu Mr.Naresh Babu Merugu <b>Kattupalli Sudhakar</b> Dr.JyotiKharade Om Prakash Singh Mrs.S. Biruntha Dr. Mauparna Nandan Mrs. Avula Geethanjali	202341025123	02/04/2023	05/05/2023
<b>ASE-01</b>					
5.	Semi-Automated Farming Structure	Raghava Sai Murthy Puppala, Gopinath Chowdary Ponnaganti, Dr. Venkateswarlu Alapati, Naga Bagradwaj Purighella, Sricharan Snagala, Gaurav S Kumar, <b>Simhadri Indrasena Reddy</b> , Dr. P. Phani Prasanthi	129522 <b>(Design Patent)</b>	30/11/2022	21/02/2023
<b>CSE-01</b>					
6.	An IoT based Autonomous Robot Monitoring System	Dr. D. Venkata Subbaiah	1195896 <b>(Design Patent)</b>		19/01/2023
<b>ECE-08</b>					
7.	T - Slits on Circular Patch Antenna System and Method to Establish IoT Applications	<b>Dr. E.V. Krishna Rao</b> Gadameedi Dinesh Kumar, Bhukya Srinivasarao U.V. Ratna Kumari M. Sree Ram Kiran Kethavath Kumar Nayak	202241075829 <b>(AICTE-KAPILA)</b>	27/12/2022	06/01/2023
8.	A Rectangular A-Shaped Microstrip Patch Antenna with Defected Ground Structure for Wireless Communications	<b>Dr.P.Rakesh Kumar</b> , Dr. E.V.Krishna Rao, A. Uma Maheswari, Y. Sirisha, K. Kushal Kumar, D. Pavan Gurudev	202341002404 <b>(AICTE-KAPILA)</b>	12/01/2023	17/02/2023
9.	An Artificially Intelligent Smart Medical System using Soft Computing	<b>Dr. Poornaiah Billa</b> Dr. Satyanarayana Talam Dr. Rambabu Busi Dr. E.V. Krishna Rao	202341002403 <b>(AICTE-KAPILA)</b>	12/01/2023	17/02/2023
10.	A Fully Automated Vehicle Control System using System on Chip Technology	<b>Dr. G.L.N. Murthy</b> Mr. M.K. Lingamurthy, Mr. M. Samba Siva Reddy	202341002405 <b>(AICTE-KAPILA)</b>	12/01/2023	17/02/2023

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11.	A Tide Wave Energy Harvester using the Piezoelectric Unimorph Cantilever Beam	<b>Dr. Satyanarayana Talam</b> Dr. E.V. Krishna Rao Dr. Rambabu Busi Dr. Poornaiah Billa	202241053891 <b>(AICTE-KAPILA)</b>	21/09/2022	30/09/2022
12.	Smart Voltage Level Shifter for Nano-Device Applications	<b>Dr. Srinivasulu Gundala</b> <b>Dr. Y. Amar Babu</b> <b>Mr. N. Dharmachari</b> <b>Mr. Gummadidala Venkata Rao</b>	202241075343 <b>(AICTE-KAPILA)</b>	26/12/2022	30/12/2022
13.	Hand Gesture Recognition System Using Machine Learning Algorithm for Physically Challenged People	<b>Dr. Srinivasulu Gundala</b> <b>Dr. E. V. Krishna Rao</b> <b>Dr. Y. Amar Babu</b> <b>Dr. T. Satyanarayana</b>	202241075342 <b>(AICTE-KAPILA)</b>	26/12/2022	30/12/2022
14.	Computer Aided Diagnosis System for Cancer Histology Images using Discriminative Patches based on Clustering and Deep Learning	Mr.G.Vijay Kumar Mr.P.Murali Krishna Mr.U.Dhanunjaya Mr.P.R.Rajesh Kumar Mrs.Earli.Manemma Dr. Adluri Phanindra <b>Mrs.Pavani Kollamudi</b> Mrs.C.Nagamani Mr.Adepu Rajesh Mr.Satyabrata Jena	202241068607	29/11/2022	23/12/2022
<b>EEE -05</b>					
15.	A Machine Learning Algorithm to Assess Autism and its Symptoms in Computer Vision Technique Tools	Dr. S. Roselin Mary Priya C B Dr. C. Gnana Kousalya <b>Dr. A.V.G.A. Marthanda</b> Dr. G. Rohini Dr. R. Ramkumar Dr. R. Thiagarajan Ms. J. Omana	202241046403	16/08/2022	26/08/2022
16.	A Robust Optimal Controller for Generator Side Converter of Wind Driven Energy Conversion System	<b>Dr. Konda Ramalingeswara Prasad</b> <b>Dr. Janapati Siva Vara Prasad</b> <b>Dr. Gudupudi Nageswara Rao</b>	202241053890 <b>(AICTE-KAPILA)</b>	21/09/2022	30/09/2022

SI.	Patent Title	Applicants/ Inventors	Patent No.	Filed Date	Published Date
17.	Robotic application based Smart and Self analysis of Electric Vehicles Fault Identification and Rectification	<b>Dr. Gudipudi Nageswara Rao</b> Dr. Yogendra Rathore Dr.Manish Shrimali S.Sakthi Anand Goswami Vivek Dubey Rashi Goswami Malini T Dr Annal Ezhil Selvi S <b>Jonnala Subba Reddy</b> Samraat Sharma Prabhdeep Singh	202241048681	26/08/2022	02/09/2022
18.	Designing a framework of IOT integrated with PV solar cells to increase the renewable energy extraction by capturing the solar rays	<b>Dr.G.Nageswara Rao</b> Dr. Pradosh Kumar Sharma Sanjay Srivasthava Mukesh Kumar MD Ahsan SJ Khanam Mohd Esa Dr.Shweta Rani Dr.Sumit Kumar Gupta Dr.Animesh Kumaer Sherma Stinivasan C P.Velmurugan	202241056904	02/09/2022	18/08/2022
19.	Robotic Application Based Smart and Self Analysis of Electric Vehicles Fault Identification and Rectification	<b>Dr.Gudipudi Nageswara Rao</b> Dr.Yogendra Rathore Dr.Manish Sharimali S.Sakthi Anand Goswami Vivek Dubey Mohd Esa Malini T Dr.Annal Ezhil Selvi S <b>Jonnala Subba Reddy</b> Samraat Sharma Prabhdeep Singh	202241048681	02/09/2022	26/08/2022
<b>IT-04</b>					
20.	A Computational System that Computes Network Condition in Cloud Based Software as a Service (SaaS)	<b>Dr. Annapareddy V. N. Reddy</b> <b>Dr. Kampa. Lavanya</b> <b>Dr. B. Srinivasa Rao</b> <b>Dr. E. V. Krishna Rao</b> <b>Phaneendra</b> <b>Kanakamedala</b>	202241075345 <b>(AICTE-KAPILA)</b>	26/12/2022	30/12/2022

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21.	Reliability-Driven Time Series Data Analysis in Multiple-Level Deep Learning Method	<b>Dr. Kampa. Lavanya</b> <b>Dr. B. Srinivasa Rao</b> <b>Dr. E. V. Krishna Rao</b> <b>Sarvani Anandarao</b> <b>Gollamandala Vijaya Suresh</b> <b>Dr. Annapareddy V. N. Reddy</b>	202241075344 (AICTE-KAPILA)	26/12/2022	30/12/2022
22.	An AI-based System for Enhancing Conversational Abilities and Personality Development and Method Thereof	<b>Dr. Satuluri Naganjaneyulu</b> <b>Mrs. R. Pavithra</b> <b>Mr. M. Vijay Kumar</b> <b>Mr. K. Rajasekhar</b>	202341007075	03/02/2023	24/02/2023
23.	Artificial Intelligence (AI) Based Pedagogical System for Progressive Skill Development	<b>Mr. G. Rajendra</b> <b>Dr. Buraga Srinivasa Rao</b> Mr. Cheruku Poorna Venkata Srinivasa Rao Mr. P. V. V. S. D. Nagendrudu	202341007077	03/02/2023	24/02/2023
<b>MECH-19</b>					
24.	Machine Learning based prediction of recommended song selections based on the people mindset using the dataset of age and emotional words using deep learning algorithm	Dr. L. Bharathi Dr. Govindraj B. Chittapur Amogh Babu K A V. Senthil Kumar Dr. P. Banu Priya Dr. Subhabrata Banerjee <b>Mr. Jonnala Subba Reddy</b> B.Tapasvi	202241038948	06/07/2022	22/07/2022
25.	A Smart and Handy Cleanser for Fabrics	Dr. V. Anantha Lakshmi Dr. Sridhar S Dr. Gangadhar N B. Amarnath Naidu Vemula Venkatakondaiah <b>Jonnala Subba Reddy</b>	202241042605	26/07/2022	29/07/2022
26.	Hygiene Robotic-based Agricultural Practices to Maintain the Crops from inferring their growth with Unwanted plants and weeds by avoiding Nutrition Sharing	Dr. Mahesh Mallampati Sharada K A Dr.S.M.Ramesh Dr Rajbhoj Balaji Govindrao Dr.VinothKumar.V Pradip Kumar Saini Preeti Avasthi <b>Jonnala Subba Reddy</b>	202241042295	23/07/2022	29/07/2022

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27.	IoT, Big Data science & Analytics, Cloud Computing and Mobile App based Hybrid Model for Healthcare Management System	Dr. T. S. Sasikala Archana V Nair S Dr.S.Raju Mrs. Anjana S Dr Anuradha Sarkar Rejini K Dr. S. Srinivasan Dr. Naresh Kumar U <b>Jonnala Subba Reddy</b>	202241043737	29/07/2022	12/08/2022
28.	Designing an Artificial Intelligence module for analyzing Six Sigma-based Approaches to Business Practices in Manufacturing, Services, and Production	Dr N Priyadharshini Dipesh Daddelal Uike Dr.K.Kalaivani Kalpanadevi D Bhola Khan R. Veerappan Prof. Surendra Ramesh Sawardekar Dr.A.Sumithra <b>Jonnala Subba Reddy</b> Dr.A.Sasi Kumar Dr. Animesh Kumar Sharma Mr. Shyamal Mandal	202241045393	09/08/2022	19/08/2022
29.	Artificial Intelligence and Machine Learning based approach to Predict the preferences of target customers for various Marketing Strategies	A. Priyadharshini Suman Devi Dr. Syed Asadullah Hussaini Dr. Vikas Tripathi Dr. Mohammed Azam Dr. Urmilla Sarkar Dr. Gurumeet Wadhawa <b>Jonnala Subba Reddy</b> Dr. G. Sudhagar Prof (Dr). Nitin Girdharwal Prof. Jitendra Charan Dr. A. Sasi Kumar	202241045453	09/08/2022	19/08/2022
30.	Artificial Intelligence based system along with IoT Alert Mechanism to Predict the Occurrence of Earthquake and Safeguard the Buildings from its Disastrous Effects	Dr. R. Vijay Kumar Dr. Deepak Nathuji Kakade Dr. Droupti Yadav Ruthra R Suvarna Devidas Kamble Dr. Shweta Rani NyathaniMaramu Dr. Ravindra D Nalawade Dr.P.Arulprakash Prof.S.Pranavan Dr.A.Sasi Kumar <b>Jonnala Subba Reddy</b>	202241046666	17/08/2022	26/08/2022

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31.	A smart robot to manage and Monitor the Covid 19 patients along with treating them by reducing the burden on medical practitioner	Ajith V S Swati Trivedi Akriti Pal Dr. Droupti Yadav Yadvendra Dutt Shukla Neha Srivastava Ankur Srivastava <b>Jonnala Subba Reddy</b> Mohd Esa Banupriya V Dr. Nagsen Samadhan Bansod Umesh Chandra Pandey	202241046505	16/08/2022	26/08/2022
32.	Systematic approach to analyse the impact of utilising the aspects of green building in construction technology	Dr. S. M. Subash Dr. Deepak Kakade Dr.M.Chittaranjan Ravindra Kumar Goliya Pavan Kumar Thimmaraju Dr. Ravindra D Nalawade Dr.Rashmi Trivedi Dr. Droupti Yadav Prof. S.Pranavan <b>Jonnala Subba Reddy</b> Digambar Balasaheb Patil Mr. Nishant Anantrao Upadhye	202241048680	26/08/2022	02/09/2022
33.	Machine Learning approaches to for Improving the Automatic Solar Light Tracking System for Energy Efficiency	Sudeshna Surabhi Dr. T. Jeya Shree R. Kiranmayi Md Ahsan Anjum Ayyaj Patel Ekta Menghani Rashi Goswami <b>Jonnala Subba Reddy</b> Dr. K. Boopathy Dr. Subhash Chander Dr Sumit Kumar Gupta Samraat Sharma	202241050110	02/09/2022	09/09/2022

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34.	Machine Learning based approach to analyse the Characteristics of Various Nano Materials and their impact in Improving Agricultural Yield	Ramya M Dr. Vishal Mehta Dr. Deepa Sharma Preethi Vasanthakumar Tekle Leza Dr. Piyush Thakur Kumud Tanwar Dr. Swati Jha Karthi K <b>Jonnala Subba Reddy</b> Dr Vishnu Kiran Manam Dr.ThimmaiahBayavanda Chinnappa	202241052856	15/09/2022	07/10/2022
35.	Thermal Analysis Of Polymer-Modified Road Bitumens	Dr.S.Sathees Kumar Dr.Shashishankar.A Dr. S. Sheeju Selva Roji Dr. Katakam Satyanarayana MrsManepalli.Sailaja Mr. Ankush BalajiraoKhansole Mr. Chandresh M. P. Dr. R. Meenakshi Reddy Mr. Sakthi <b>Mr.Kolagotla Venkateswara Reddy</b>	202241062488	02/11/2022	11/11/2022
36.	Smart Robotic Application Integrated With Internet Of Things Techniques To Automate The Process Of Physiotherapy Exercises	Dr. Vadhri Suryanarayana Dr Priyanka Sethi Dr Preeti Saini Dr. Ganesh K Khushboo Sharma Prof.NiranjanBarnwal <b>A Nageswara Rao</b> Dr. Bhasker Pant	202241040814A	17/07/2022	29/07/2022
37.	Design And Fabrication of Multi Functional Air Conditioning System	<b>B. Kamala Priya.</b> Dr. K. Dilip Kumar, P. Mounika, I. Bindu, B. Sudheer Kumar, <b>B. Udaya Lakshmi,</b> A. Dhanunjay Kumar, Kiran Sai Gorle, C. Trishit	202341011370	20/02/2023	24/03/2023



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38.	Predicting the industrial maintenance based on iot and ant colony optimization algorithm	Dr.Yogesh Pal Keerti Patil Ravindra Kumar Yadav Subasish Mohapatra Subhadarshini Mohanty <b>Dr. Siva Sankara Babu Chinka</b> Sindu Devi J Prof. Dr. E. Daniel Francis Dr. Deepak Dalal Dr. Mamta Sharma Dr. Animesh Kumar Sharma Dr. Pasupuleti Subrahmanya Ranjit	202311025408	04/04/2023	19/05/2023
39.	Ultra light weight natural fiber composites for aerospace applications	Sivasubramanian palanisamy Santhosh kumar D Kumaran Prema Kumar <b>Sudher kumar Battula</b> Dr. P.C Krishnamachary Dr. P. Suresh Kumar M.Sudhakar	202321032319	08/05/2023	16/06/2023
40.	A Smart and Collapsible Space-Saving Head Guard for Riders	Dr. Venkateswarlu Reddy Siripireddy M. Anand Dr. K. Anandan Dr. Avinash Gudimetla <b>Seelam Rami Reddy</b> Dr. Sanjit Kumar Dash	202341020328	23/03/2023	07/04/2023
41.	Smart and Compact Foldable Storage System	Ch. Leela Naga Deepika Dr. Katta Subba Rao <b>Seelam Rami Reddy</b> Dr. Reema Mathew A. Dr. H. Parthasarathi Patra Dr. Punyaban Patel	202341020183	22/03/2023	31/03/2023
42.	An Apparatus for the Friction Stir Process	Dr. K. Satyanarayana <b>Dr.Murahari Kolli</b> K. Raj Kiran Abdul Chan Basha	202341040400	14/06/2023	30/06/2023
<b>MBA-03</b>					

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43.	Investigation Sustainable Business Growth Via Human Recourse Management	Dr.K Mallikarjuna Rao Prof Meera Mathur <b>Dr. T. Rajasekhar</b> Ms.VasudhaKurikala Dr. Mora Murali Dr. Rajesh B. Survase Prof. Manoj Kumar Mishra Dr Amrita Chaurasia Dr.P.Gurusamy Ms.Saswati Jena Dr.Manoj Kumar Katual Dr. Harikumar Pallathadka	202241038950	06/07/2022	22/07/2022
44.	Analysis of Social Media Marketing Is A Part of Marketing Plans for Small and Medium Sized Business	Dr. Manish Joshi Mr. Kaushik KumarRatilal Dalvi Mr. Shyam Sundar J Prof. Manoj Kumar Mishra <b>Dr T. Rajasekhar</b> Dr.P.Gurusamy Ms.Saswati Jena Mrs.Chitsimran Mr. Sumit Kumar Lt.(Dr) Seema Singh Dr.Manoj Kumar Katual	202221037119	28/06/2022	15/07/2022
45.	Design of A Smarter and Automated Delivery Systems for E-Commerce Sites for Safer and Tracked Delivery of Ordered Products	Dr. M Aklimuthu <b>Dr. Naresh Ogirala</b> Mr. B.D Patil, Dr Vivek Dube T Jaya Sivakumar Dora Shwetha S M, Subha N Rinkoo Bhatia Dr. DeekpakSamptha Kumar Vikas Sharma Dr. Rupa Kanna Malhotra Dr. Manoj Kumar	202241049723	31/08/2022	09/09/2022

Dean R&D