



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

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An ISO 21001:2018, 14001:2015, 50001:2018 Certified Institution  
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada  
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## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### Artificial Intelligence & Machine Learning Research Group

#### INTRODUCTION:

The **Artificial Intelligence & Machine Learning (AI & ML) Research Group** in the **Department of Computer Science and Engineering** at **Lakireddy Bali Reddy College of Engineering** is focused on pioneering research in AI and ML applications. The group works on cutting-edge topics like deep learning, computer vision, and predictive analytics, aiming to develop innovative solutions to real-world challenges.

Guided by a team of experienced faculty, the group encourages publishing research in repeated journals and presenting at major conferences. We regularly organize workshops, seminars, and guest lectures with experts from both industry and academia to promote the continuous advancement of knowledge.

#### **Objectives of the AI & ML Research Group:**

1. **To design and develop AI & ML models** for a wide range of applications, including but not limited to data science, automation, robotics, natural language processing, and predictive analytics.
2. **To conduct staff colloquiums** and knowledge-sharing sessions aimed at upgrading faculty and students' understanding of the latest advancements in AI & ML technologies.
3. **To organize workshops, faculty development programs (FDPs), guest lectures, and seminars** led by experts from industries, academia (Universities, NITs, IITs), and research labs to help participants stay abreast of advancements in AI, deep learning, machine learning algorithms, and their applications.
4. **To leverage high-performance computing facilities and licensed software** to conduct cutting-edge research and produce high-quality publications in AI & ML. Available licensed tools may include platforms like TensorFlow, PyTorch, Matlab, and other data analysis software.
5. **To submit research proposals** to government funding bodies such as AICTE, UGC, DST, and private research foundations for securing grants aimed at advancing AI & ML research.
6. **To promote a research-driven mindset** among faculty and students by encouraging them to explore innovative AI & ML ideas, develop prototypes, and work on real-world industry problems.
7. **To encourage the submission of research papers** in top-tier AI & ML journals and conferences, such as SCIE, Scopus, and UGC-listed journals, and ensure the work meets global standards.

8. **To enhance the quality of final year B.Tech projects** by integrating state-of-the-art AI & ML techniques, enabling students to work on projects that have practical and societal impact.

**Members of AI & ML Research Group:**

<b>S.NO</b>	<b>Name of the Member</b>	<b>Designation</b>
<b>1.</b>	Dr. D. Venkata Subbaiah	Coordinator
<b>2.</b>	Dr. Ch.Venkata Narayana	Members
<b>3.</b>	Dr.S. Nagarjuna Reddy	
<b>4.</b>	Dr. K Venkatrao	
<b>5.</b>	Mr. A.S.R.C. Murthy	
<b>6.</b>	Mrs.B.Swathi	
<b>7.</b>	Mr. N.V. Naik	
<b>8.</b>	Mr. A. Sudhakar	
<b>9.</b>	Mr. N. Srinivasa Rao	
<b>10.</b>	Mr. Ch. Srinivasa Rao	
<b>11.</b>	Ms.P.Sarala	
<b>12.</b>	Ms. B. Usha Rani	
<b>13.</b>	Mr.D. Anil Kumar	
<b>14.</b>	Mr. A. Koteswara Rao	
<b>15.</b>	Ms.M.Swathi	
<b>16.</b>	Ms.T.Vineetha	

# **JOURNALS**

1. **“Enhanced deep learning models for automatic fish species identification in underwater imagery”**, Siri D, Gopikrishna Vellaturi, Shaik Hussain Shaik Ibrahim, Srikanth Molugu, **D.Venkata Subbaiah** Raviteja Kocherla, Ramesh Vatambeti, Heliyon(Q1) 27-07-2024, ISSN NO. 24058440.  
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2. **“Prediction of Alzheimer's Disease Using Modified DNN with Optimal Feature Selection Based on Seagull Optimization”**, Bhansali A Sudheer D Tiwari, Shrikant, **D. Venkata Subbaiah**, Ahmad F, Journal Of Imaging Informatics In Medicine(Springer), 11-12-2024, ISSN: 2948-2925.  
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3. **“Enhancing security and efficiency in Mobile Ad Hoc Networks using a hybrid deep learning model for flooding attack detection”**, Pramodh Krishna D, E. Sandhya, Khaja Shareef Sk, Srihari Varma Mantena, **D. Venkata Subbaiah**, Ch Koteswara rao, Srinivasa Rao Vemula & Maruthi Vemula, in Scientific Reports, 15:818, 04-01-2025, ISSN: 20452322.  
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2. **“An Integrated Anomaly Detection Framework For Stream Data Using Extended Lof With Window Method”**, A Sree Rama Chandra Murthy, **CH. Venkata Narayana**, Journal of Theoretical and Applied Information Technology, 15th January 2025. Vol.103. No.1, ISSN: 1992-8645, E-ISSN: 1817-3195.  
<https://www.jatit.org/volumes/Vol103No1/13Vol103No1.pdf>
3. **“Leveraging Flask API and machine learning to forecast Multiple Diseases”**, .Venkateswara Rao, D.Srilatha, Sridevi Sakhamuri, **D.Venkata Subbaiah**, M.Asha Priyadarshini, P.Ramya, Communication on applied Nonlinear analysis, Vol 32(1), 2025, PP: 150-162, ISSN: 1074-133X.  
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4. **“Selective Weighting and Prediction Error Expansion for High-Fidelity Images”**, Ravi U, Sriramulu B, Neeraj Kumar Sharma, Prem Kumar C, **Sree Rama Chandra Murthy A**, SN Computer Science ( H-Index:35,**Q2**, Impact Factor:0.72), article number 850,pg.no.5, 2-Sep-24, 2662995X/ 26618907.  
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5. **“Wielding Neural Networks to Interpret Facial Emotions in Photographs with Fragmentary Occlusions”**, Fusion: Practice and Applications( H-Index:8,**Q4**, Impact Factor:0.15), K. Anji Reddy , K. Sivarama Krishna , B Prakash Battula , **B. Usha Rani** , P. V. V. S. Srinivas ,**Vol. 17**, Issue-1, Pg.No: 146-158, Aug-24, ISSN (Online):2692-4048,ISSN (Print):2770-0070.  
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6. **“Advancements in Deep Learning Techniques for Potato Leaf Disease Identification Using SAM-CNN Classification”**, Shruti P, Anusuya Devi V Satya, **B. Usha Rani**, Pramodh Krishna D, Manohar M, Aruna devi T, Ramesh V, Ingénierie des Systèmes d’Information (ISI), Vol. 29, Issue: No. 5, Oct-24, pp. 2021-2030, ISSN: 1633-1311 (print); 2116-7125 (online).  
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7. **"An Enhanced Early Detection and Risk Prediction Of Brain Tumors Using Mri-Ct Scans With Deep Learning Technique"**, Dinesh Valluru, K. Varada Raj kumar, Praveen Kumar K, **B. Usha Rani**, Dr. E. Sreedevi, J V Rama Kumar, Pradeep J, Dr. Siva Kumar P, Journal of Theoretical and Applied Information Technology, Vol.102, pg.no: 21, 45597, 15th November 2024, ISSN: 1992-8645/E-ISSN: 1817-3195.  
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8. **“A two-step machine learning approach for predictive maintenance and anomaly detection in environmental sensor systems”**, Saiprasad Potharaju ,Ravi Kumar Tirandasu, Swapnali N. Tambe, Devyani Bhamare Jadhav , **D. Anil Kumar**, Shanmuk Srinivas Amiripalli, MethodsX, Volume 14, June 2025, 103181, pg.no: 1-11, 28-Jan-2025, E-ISSN: 22150161.  
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9. **“Predicting Air Quality Index in Real Time and Classifying Its Health Effects: Advancements in Machine Learning”**, Narendra Babu P, Dasari Anusha, **D. Anil Kumar**, Ruqsar Zaitoon, K Jairam, M.V.P. Umamaheswara Rao, International Journal of Medical Toxicology & Legal Medicine, Vol. 27, Issue: No.5, 2024, pg.No: 194-202, 01-Jan-2025, E-ISSN: 0974-4614, Print-ISSN: 0974-4614.  
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10. **“Real-Time E-commerce Insights with Mean Shift Clustering: A Dynamic Approach to Customer Understanding”**, **Ch. Srinivasa Rao**, Trivikrama Rao. B, Narayana G, Narasimha Swamy L, Prasad G, International Journal of Computational and Experimental Science and ENgineering(IJCESEN), Vol. 10, Issue 4, pg.No:1344-1350, 2024-12-11, ISSN: 2149-9144.  
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11. **“Bridging the Gap between Technology and Medicine through h the Revolutionary Impact of the Healthcare Internet of Things on Remote Patient Monitoring”**, **Ch. Srinivasa Rao**, Kiran Sree Pokkuluri, Vibha Tiwari, Jyoti U, P Mehta, Annamaraju Thanuja, Journal of Intelligent Systems and Internet of Things ( H-Index:3), Vol. 13, No. 02, PP. 212-222, 2024, July 2024, ISSN: 26906791, 2769786X  
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1. **“Epidermal Neoplasm Detection Using Convolutional Neural Networks”, Ch. Venkata Narayana;** E. Stella; Y Harshitha Sampath; D Dhanush Kumar, 2024 5th International Conference for Emerging Technology (INCET), Date of Conference: 24-26 May 2024, Date Added to IEEE Xplore: 26 July 2024, Conference Location: Belgaum, India, Electronic ISBN:979-8-3503-6115-5, Print on Demand(PoD) ISBN:979-8-3503-6116-2.  
DOI: [10.1109/INCET61516.2024.10593049](https://doi.org/10.1109/INCET61516.2024.10593049).
2. **"An Efficient License Plate Recognition Model Through Deep Learning Integration with YOLO and OCR Techniques"** N. Supriya, D. Chiranjivi, M. I. Khader Shariff, B. Sowjanya, **D.Venkata Subbaiah**, A. Lakshmanarao, 2024 International Conference on Advances in Modern Age Technologies for Health and Engineering Science (AMATHE), Shivamogga, India, 12-07-2024, pp. 1-5, ISBN:979-8-3503-7156-7, 979-8-3503-7157-4.  
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4. **“Melodies in the Machine - Gru's Role in Crafting Musical Elegance”, N.V. Naik;** Kondla Maha Lakshmi; Muddada Yogeesh; Thatikonda Mounika, 5th International Conference for Emerging Technology (INCET), Date of Conference: 24-26 May 2024, Date: 26 July 2024, Conference Location: Belgaum, India, Electronic ISBN:979-8-3503-6115-5, ISBN:979-8-3503-6116-2.  
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<https://ieeexplore.ieee.org/document/10593195/authors#authors>.
5. **“Pioneering Early Parkinsons Disease Detection with Deep Learning and Image Processing Innovations”, Mr. N. Srinivasa Rao**, Mohammad Basith Anwar Khan, P Haneesha, P Meghana, 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS), Date of Conference: 07-09 August 2024, Oct-24, Coimbatore, India, ISSN:2575-7288/2469-5556 ISBN:979-8-3503-8436-9/979-8-3503-8435-2.[10.1109/ICACCS60874.2024.10716990](https://doi.org/10.1109/ICACCS60874.2024.10716990)
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7. **“An Enhanced Microarray Sample Classification Using Machine Learning “**, 2024 5th International Conference for Emerging Technology (INCET), **B. Usha Rani;** G

8. **“An Advanced Deep Learning Approach for Dietary Recommendations using ROBERTA** **“,Mrs. B. Usha Rani; T Joshnavalli; B Srikanth Reddy; A Sreelaasya,** 2024 4th International Conference on Intelligent Technologies (CONIT), 15-Aug-24, ISBN:979-8-3503-4990-0/979-8-3503-4991-7.  
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9. **“Identifying Bikers Without Helmets and Triple Riding Automatically”,** Dasari Anusha; Durga Satish Matta; **Dudla Anil kumar;** Dudla Prabhakar , Cognitive Computing and Cyber Physical Systems (IC4S 2024), pp 464–473, Date:2025-02-09, E-ISSN:1867-8211.  
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12. **“Prediction of CardioVascular Diseases with Retinal Images Using Deep Learning”,** T. Vineetha, D. Rami Reddy, K. Mahendra, B. Dhana Lakshmi, 2024 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), July 2024, Chennai, India, ISBN: 979-8-3503-8944-9, 979-8-3503-8943-2.  
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### **Open Access Journals**

1. **“Animal Deterrence using Computer Vision and Raspberry Pi”,** Dr. Ch. Venkata Narayana, Kundeti Vamsi, Parsa Pallavi, Gundepalli Dedeepya, Proceedings of the International Conference on Computational Innovations and Emerging Trends (ICCIET-2024), Publication Date: 30 July 2024, ISBN 978-94-6463-471-6, ISSN 2352-538X  
DOI:[10.2991/978-94-6463-471-6\\_73](https://doi.org/10.2991/978-94-6463-471-6_73).
2. **“Real-time Object Detection and Voice Labeling for Enhanced Accessibility and Visual Interaction”,** M. Swathi, Ramala Supraja, Malavathu Lakshmi Prasanna, Shaik Sameer, Guntaka Rama Krishna Reddy, Proceedings of the International Conference on Computational Innovations and Emerging Trends (ICCIET- 2024), 30 July 2024, ISBN: 10.2991/978-94-6463-471-6\_70, ISSN: 2352-538X.  
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