



## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC & NBA (Under Tier - I), ISO 9001:2015 Certified Institution,

Approved by AICTE, New Delhi. and Affiliated to JNTUK, Kakinada

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**DEPARTMENT OF INFORMATION TECHNOLOGY**

## Secure Network System Research Group

### INTRODUCTION:

The **Secure Networked Systems Research Group** in the Department of **Information Technology** at Laki Reddy Bali Reddy College of Engineering is dedicated to promoting research in the field of network and information security. The group focuses on developing secure, reliable, and efficient networked systems to address modern cybersecurity challenges. The research group works on areas such as network security, cryptography, cloud security, intrusion detection systems, data protection, and privacy-preserving technologies. It aims to design and implement solutions that protect digital infrastructure from cyber threats and ensure safe communication across networks.

With well-equipped laboratories and modern computing facilities, the group provides strong technical support for both students and faculty to explore emerging trends in secure networking technologies. The faculty members guide students in carrying out research projects, publishing papers in reputed journals, and participating in workshops and seminars. Through continuous learning, collaboration, and innovation, the Secure Networked Systems Research Group strives to build strong expertise in cybersecurity and create a secure digital future.

### OBJECTIVES OF THE SECURE NETWORKED SYSTEM RESEARCH GROUP

- **To promote research in secure networked systems** and modern cybersecurity technologies.
- **To develop strong security solutions** to protect networks, data, and digital infrastructure from cyber threats.
- **To encourage students and faculty to participate in research projects** related to network security, cryptography, and cloud security.
- **To publish quality research papers** in reputed journals and conferences in the field of cybersecurity.
- **To organize workshops, seminars, and guest lectures** on current trends in network and information security.

- **To collaborate with industry and academic institutions** for knowledge sharing and practical exposure.
- **To support students in applying for research grants and funded projects** in secure networking technologies.
- **To create a secure and innovative research environment** within the Department of Information Technology.

Members of Intelligent Computing System Research Group

<b>S.NO</b>	<b>NAME OF MEMBER</b>	<b>DESIGANTION</b>
<b>1</b>	<b>Dr. Phaneendra K</b>	<b>Coordinator</b>
<b>2</b>	<b>Dr. G. Rajendra</b>	<b>Members</b>
<b>3</b>	<b>Dr. K. Venu Gopal</b>	
<b>4</b>	<b>Mrs. M. Hema Latha</b>	
<b>5</b>	<b>Mr. V.V. Krishna Reddy</b>	
<b>6</b>	<b>Mr. Ch. Sambasiva Rao</b>	
<b>7</b>	<b>Mr. B. Sarath Chandra</b>	
<b>8</b>	<b>Mr. Rajesh Reddy Muley</b>	
<b>9</b>	<b>Mr. M. Vijay Kumar</b>	
<b>10</b>	<b>Mr. Ch.Poorna Venkata Srinivasa Rao</b>	
<b>11</b>	<b>Mr. Bhanu Pratap Reddy B</b>	
<b>12</b>	<b>Mr. B. Ravindra Chanti Babu</b>	
<b>13</b>	<b>Mrs. T. Karuna Latha</b>	
<b>14</b>	<b>AVN Reddy</b>	

**SCIE**

1) Hajarathaiah, K., Kolli, C. S., Tatireddy, S. R., Kumar, M. S., Radha, V. K. R., & Reddy, V. V. K. (2025). Cascade Kronecker neuro–fuzzy network based influential

node identification. Applied Soft Computing, 175, 113015. IF: 7.2, PP:1-19. ISSN:1568-494 <https://doi.org/10.1016/j.asoc.2025.113015> (1-May) (Q1)

## ESCI Papers –02

1) Manas Ranjan Mohanty, Pradeep Kumar Mallick, **Annapareddy VN Reddy**, Optimizing pulmonary chest x-ray classification with stacked feature ensemble and swin transformer integration, Biomedical Physics & Engineering Express, Volume:11, Issue:01, ISSN: 2057-1976, IF:1.3, DOI 10.1088/2057-1976/ad8c46 (6-Nov-24) (Q3)

2) Praveen, S. P., Jyothi, V. E., Anuradha, C., **Venu Gopal**, K., Shariff, V., & Sindhura, S. (2024). Chronic kidney disease prediction using ML-based Neuro-Fuzzy model. International Journal of Image and Graphics, 24(06), 2340013. ISSN (print): 0219-4678 | ISSN (online): 1793-6756 <https://doi.org/10.1142/S0219467823400132> (1-Nov-24) (Q3)

## Journals

1) Chandra Sekhar Kolli, Sreenivasu Seelamanthula, **Venkata Krishna Reddy V**, Padamata Ramesh Babu, Mule Rama Krishna Reddy & Babu Rao Gumpina, Privacy enhanced course recommendations through deep learning in Federated Learning environments, International Journal of Information Technology, ISSN:2511-2104 pp:1-6 ISSN: 2511-2104, IF: 5.135 <https://doi.org/10.1007/s41870-024-02087-3> (10-Aug-24) (Q2)

2) **Kamarajugadda, R.**, Battula, R., Borra, C. R., Durga, H., Bypilla, V., Reddy, S. S., ... & Bhavanam, S. (2024). Optimizing avian species recognition with MFCC features and deep learning models. International Journal of Information Technology, 16(7), 4621-4626. IF:5.135 <https://doi.org/10.1007/s41870-024-02108-1> (10-Aug-24) (Q2)

## Scopus Conference Proceedings

1) **M. Hema Latha**, P. Ashok Reddy, Gowravarapu Sai Nandini, Vaddelli Charitha Sri & Bandi Lavanya, Plant Leaf Disease Diagnosis Using CNN and Fertilizer Recommendation, Proceedings of 3rd International Conference on Smart Computing and Cyber Security, Volume:914, pp 617–629, ISBN: 978-981-97-0573-3, [https://doi.org/10.1007/978-981-97-0573-3\\_48](https://doi.org/10.1007/978-981-97-0573-3_48)

2) Tatiparti. B Prasad Reddy, **Cheruku Poorna Venkata Srinivasa Rao**, T. Suhasini Reddy, Sukhaveerji Ghate, Modified Arithmetic Optimization with Fusion Based Deep Learning for Chronic Kidney Disease Classification on Internet of Medical Environment, AIP Conference Proceeding, Volume: 2971, Issue:01, pp:1-17, ISBN: 1551-7616, <https://doi.org/10.1063/5.0196536>

3) **K. Phaneendra**, Sk. Saleema, K. Kusumalatha, K. Akash, P. Purnima Nikitha Sai & M. Babureddy, A Cutting-Edge Approach to Forest Fire Region Identification Through Deep Learning, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:04, Page Number:41-55, ISSN: 978-981-97-6725-0, DOI: [https://doi.org/10.1007/978-981-97-6726-7\\_3](https://doi.org/10.1007/978-981-97-6726-7_3)

4) **G. Rajendra**, Gudimetla Laxmi Satwika, Jafrin Jahan, Posani Sai Vamsi Krishna & Nukala Rohith, Bone Age Prediction Using Edge Detection and ResNet50, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:04, Page Number:41-55, ISSN: 978-981-97-6725-0, DOI: [https://doi.org/10.1007/978-981-97-6726-7\\_24](https://doi.org/10.1007/978-981-97-6726-7_24)

5) **Chindam Sambasiva Rao**, C. H. Gayathri, K. Gayathri, J. Venkata Ramaiah & O. Prathyusha, Unveiling Patterns Using Machine Learning in Crime Prediction, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:01, Page Number: 133–147, ISSN: 978-981-97-6317-7, DOI: [https://doi.org/10.1007/978-981-97-6318-4\\_11](https://doi.org/10.1007/978-981-97-6318-4_11)

6) **Rajesh Reddy Muley**, Gutta Krishna Kethura, Sangoju Lalitha, Battula Yamini & Thota Kavya Sri, Intelligent Traffic Monitoring System Using Deep Learning: Triple Riding, Automatic License Plate Recognition, and Helmet Detection, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:04, Page Number: 391–402, ISSN: 978-981-97-6725-0, DOI: [https://doi.org/10.1007/978-981-97-6726-7\\_31](https://doi.org/10.1007/978-981-97-6726-7_31)

7) **M. Vijay Kumar**, M. Aswini, A. Aadhi Renuka, P. Lokesh & K. Devi Naga Harshitha, Chronic Disease Prediction Using Machine Learning, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:01, Page Number: 259–267, ISSN: 978-981-97-6317-7, DOI: [https://doi.org/10.1007/978-981-97-6318-4\\_19](https://doi.org/10.1007/978-981-97-6318-4_19)

8) **Kumar, M. V.**, Reddy, M. B., Kotta, J. P., Manvitha, G., Chandana, V. N., Prakash, A., & Nandini, J. D. L. (2025, July). Diabetic Retinopathy Classification Using Quantum-Assisted Deep Learning (Hybrid Model). In Evolution in Computational Intelligence: Proceedings of the 12th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA 2024) (Vol. 436, p. 413). Springer Nature. [Scopus Author ID: 58699317300](https://scopus.com/authors/details/scopusid/58699317300)

9) **B. Ravindra Chanti Babu**, Nazumuddin Shaik, M. Bhargavi, D. Sravani, B. Bhavana & B. Varun Sai, Leveraging Deep Learning for Efficient Brain Tumor Classification, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:04, Page Number: 391–402, ISSN: 978-981-97-6725-0, DOI: [https://doi.org/10.1007/978-981-97-6726-7\\_35](https://doi.org/10.1007/978-981-97-6726-7_35)

10) **K. VenuGopal**, Faheemullah Fathemullam, Ayyanki Susmitha, Rongali Meghana Sai, Palavai Rajeswari & Mohammad Shafeul Wara, Solar Cell Surface Defect Detection Based on Improved Yolo V6, Intelligent Computing and Automation, Vol:04, 29 March 2025, pp 355–370, ISBN:978-981-96-0143-1, [https://doi.org/10.1007/978-981-96-0143-1\\_28](https://doi.org/10.1007/978-981-96-0143-1_28)

11) **K. VenuGopal**, Faheemullah Fathemullam, Budigi ManjuBharathi, Gogineni Anusha, Gugulothu Sravani & Sandeep P. Abhang, Advanced Deep Learning Integration with Investor Sentiment for Accurate Stock Price Prediction, Intelligent Computing and Automation, Volume:04, 3/29/2025, pp 339–353, ISBN:978-981-96-0143-1, [https://doi.org/10.1007/978-981-96-0143-1\\_27](https://doi.org/10.1007/978-981-96-0143-1_27)

12) **Hemalatha Munnamgi**, P. Ashok Reddy, Gudibandi Poojitha, Mallipam Satya Praneeth, Thatikonda Swathi & Shreyas Upendra Dingankar, Machine Learning for Premature Birth Prediction During Pregnancy, Intelligent Computing and Automation, Volume:04, 3/29/2025, pp 311–323, ISBN:978-981-96-0143-1, [https://doi.org/10.1007/978-981-96-0143-1\\_25](https://doi.org/10.1007/978-981-96-0143-1_25)

**13) V. V. Krishna Reddy**, Susmitha Cherukuri, Karthikeya Vanaparla & Lakshman Rishi Avula, Deep Feature Extraction for Fashionable Fabrics: Using ResNet50, MobileNet, and CNN, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:02, 2/19/2025, pp 417–429, ISBN:978-981-97-7178-3, [https://doi.org/10.1007/978-981-97-7178-3\\_36](https://doi.org/10.1007/978-981-97-7178-3_36)

**14) Rajesh Reddy Muley**, M. Bala Chowdeswari, Sk. Reshma, P. Siva Prakash, Budeti Jaya Prakash & Smita Desai, Multi object Detection and Distance Estimation System for Enhanced Spatial Awareness in the Visually Impaired People, Intelligent Computing and Automation, Volume:04, 3/29/2025, pp 325–338, ISBN:978-981-96-0143-1, [https://doi.org/10.1007/978-981-96-0143-1\\_26](https://doi.org/10.1007/978-981-96-0143-1_26)

**15) Cheruku Poorna Venkata Srinivasa Rao**, Kodhamala Swarna, Shaik Asif Basha, Thopula Nikitha & Pagadala Komali, Innovative Methods Toward the Real-Time Detection of Ulcers in Diabetic Feet, Proceedings of Fifth Doctoral Symposium on Computational Intelligence, Volume:02, 2/19/2025, pp 321–330, ISBN:978-981-97-7178-3, [https://doi.org/10.1007/978-981-97-7178-3\\_28](https://doi.org/10.1007/978-981-97-7178-3_28)

16) Devi, Y. S., Chaitanya, A., Kumar, K. S., Chandra, P. B., & **Gopal, K. V.** (2024, September). Smart Fan with Sensor based Activation and Environment Control System. In 2024 5th International Conference on Smart Electronics and Communication (ICOSEC) (pp. 265-272). IEEE. [10.1109/ICOSEC61587.2024.10722136](https://doi.org/10.1109/ICOSEC61587.2024.10722136) Electronic ISBN:979-8-3315-0440-3

17) Sirisha, J., **Chandra, B. S.**, Madhavi, B., Thirupathamma, B. L., Vallabhapurapu, T., & Penjarla, N. K. (2024, September). Advanced Deep Learning Techniques for Accurate Detection of Pathological Infant Cry Signals. In 2024 4th International Conference on Soft Computing for Security Applications (ICSCSA) (pp. 256-264). IEEE. Electronic ISBN:979-8-3315-1572-0, DOI: [10.1109/ICSCSA64454.2024.00047](https://doi.org/10.1109/ICSCSA64454.2024.00047)

18) **Chandra, B. S.**, Kalyan, M. P., Chanikya, S., Reddy, S. S., & Reddy, D. S. (2025, July). Fingerprint Based Blood Group Classification Using Deep Learning. In Evolution in Computational Intelligence: Proceedings of the 12th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA

2024) (Vol. 436, p. 399). Springer Nature.  
<https://www.scopus.com/authid/detail.uri?authorId=59717073000>

19) Raffik, R., Misra, P. K., Kolli, C. S., **Reddy, V. K.**, Chandol, M. K., & Shukla, S. K. (2024, August). Classification of defective product for smart factory through deep learning method. In AIP Conference Proceedings (Vol. 2937, No. 1, p. 020029). AIP Publishing LLC. <https://doi.org/10.1063/5.0218182>

20) Kolli, C. S., Seelamantula, S., **Reddy, V.**, Suryanarayananaraju, S., Elamathi, E., & Balleda, R. K. (2025). Comprehensive Exploration of Generative Pre-trained Transformer. In International Conference on Data Analytics & Management (pp. 487-507). Springer, Singapore.

21) **Reddy, V. K.**, Cherukuri, S., Vanaparla, K., & Avula, L. R. (2023, March). Deep Feature Extraction for Fashionable Fabrics: Using ResNet50, MobileNet, and CNN. In Doctoral Symposium on Computational Intelligence (pp. 417-429). Singapore: Springer Nature Singapore.