

Name of Faculty Dr. Kadiyala Ramana
 Designation Associate Professor
 Nature of Job/Appointment Contract
 Date of Joining 12 – 05 - 2022
 E-mail kramana_it@cbit.ac.in



| Education Qualifications | Name of the Degree | Class |
|--------------------------|----------------------------|------------------------|
| Ph. D | Doctor of Philosophy (CSE) | Awarded |
| PG | M. Tech. (IT) | First with Distinction |
| UG | B. Tech (IT) | First |

Work Experience

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| Teaching | 14 Years |
| Research | 06 years |
| Industry | -- |
| Others | -- |

Area of Specialization High Performance Computing, Image Processing,

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|---------------------|-----------------|
| IEEE | 93098440 |
| ISTE | LM134721 |
| IACSIT, Singapore | 80338110 |
| IAENG, Hongkong | 107592 |
| WASE, Hongkong | WASE0000663 |
| UACEE, India | A7800613 |
| APCBEEES, Hongkong | 200299 |
| CSTA, New York, USA | 3576974 |
| SCIEI, Hongkong | 009120111110001 |
| IAEST | 012084224 |
| IEDRC | 10080167 |
| SDIWC | 3190 |

Professional Memberships

Responsibilities held at Institution Level --

Responsibilities held at Department Level --

Research Guidance Ongoing - 03

Awards Received --

Courses Handled at Under Graduate / Post Graduate Level. Computer Networks, Computer System Architecture, Python Programming, OOP, Unix and Shell Programming, DBMS, Network Programming, C Programming and Data Structures.

No. of Papers Published National Journals – 02 International Journals – 39
 National Conference – 11 International Conference – 10

Projects Carried out --

1. Patent is published on “SYSTEM AND COMPUTER IMPLEMENTED METHODS FOR ANALYSING FEATURES OF DIGITAL MEDICAL IMAGES”, with Application number 201941049665 on 20.12.2019 India.

2. Patent is published on “SYSTEM AND METHOD FOR DETECTION AND CONTROL OF CYBERATTACKS IN LARGE NETWORK USING DATA MINING”, with Application number 202011005996 on 21.02.2020 India.

3. Patent is granted on “EARLY COVID PREDICTION:

NEURO FUZZY MULTI-LAYERED DATA CLASSIFIER” with Application number 2020102448 on 27-09-2020 Australia.

4. Copyright is Granted on “INTERNET OF THINGS (IOT) ENABLED SECURE SMART CITY APPLICATION” with Registration number L-105142 / 2021 on 06-07-2021 India.

Technology Transfer

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1. Expert Talk on “Research Directions on Federated Learning” in National Level Workshop on Insights of Federated Learning in Computing organized by School of Computing, SRM university, Chennai on 25th September 2021.
2. Session Chair for the track “Emerging Technologies” in the DST SERB sponsored International Conference on “Data Science, Intelligent Computing and Cyber Security organized by Sree Vidyanikethan Engineering College, Tirupati during 29-30 December 2021.
3. Session Chair for the National Conference on Knowledge, Innovations and Technologies for Sustainability organized by Sree Vidyanikethan Engineering College, Tirupati during 28th April 2022.

Invited Speaker

1. Penchalaiah, N., Jaladanki Nelson Emmanuel, S. Suraj Kamal, and Kadiyala Ramana, “IoT Based Automatic Irrigation System Using Wireless Sensor Networks.” In: Kumar A., Mozar S. (eds) ICCCE 2020. Lecture Notes in Electrical Engineering, vol 698, 2021, Springer, Singapore. https://doi.org/10.1007/978-981-15-7961-5_116
2. Ramana K., Ponnaivaikko M., Subramanyam A., “A Global Dispatcher Load Balancing (GLDB) Approach for a Web Server Cluster”, In: Kumar A., Mozar S. (eds) ICCCE 2018, Lecture Notes in Electrical Engineering, Vol 500. pp.341-357 https://doi.org/10.1007/978-981-13-0212-1_36

No. of Books/Chapter Published with details

3. Dr.K.Prasanna, Dr.M.Seetha, Dr. Kadiyala Ramana, “ASSOCIATION RULE MINING CONCEPTS AND APPROACHES: A DATA STRUCTURES PERSPECTIVE”, VSRD Academic Publishing, First Edition, April 2020, ISBN-13 : 978-93-87610-58-3
4. Dr. Annaluri Sreenivasa Rao, Dr. M. Rudra Kumar, Dr. Kalli Srinivasa Nageswara Prasad, Dr. Kadiyala Ramana, “NOMENCLATURE OF DATASTREAMS, MINING STRATEGIES, CONCEPT DRIFT AND RESEARCH OBJECTIVES”, Shineeks Publishers, First Edition, March 2022 ISBN: 978-1-63278-953-2

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (**Attended and/or Organized**).

1. Eight Weeks International MOOCs AICTE approved Faculty Development Programme on “Creating Open Source Cloud based Gnomio Moodle of Your Own Subject for OBE” organized by D.Y.Patil College of Engineering, Pune, 15th April – 10th June 2019.
2. A Two-week AICTE approved Faculty Development Programme on “Big Data Analytics and Machine Learning” organized by AITS, Rajampet, 18th – 30th December 2019.

3. A Two-week AICTE approved Faculty Development Programme on “Pedagogy for Online and Blended Teaching- Learning Process” conducted by IIT, Bombay, 14th September – 12th October 2017.
4. A Two-week AICTE approved Faculty Development Programme on “Foundation Program in ICT for Education” conducted by IIT, Bombay, 3rd August – 7th September 2017.
5. Five days online Faculty Development Programme on “Python Programming” conducted through Spoken Tutorial, IIT Bombay from 18-05-2020 to 22-05-2020 Organized by Department of IT, Sona College of Technology, Salem.
6. Five-day National level Online Faculty Development Program on “Artificial Intelligence” from 22-05-2020 to 26-05-2020 organized by Department of IT, Vignan’s Institute of Engineering for Women, Vishakapatnam in association with NYCI & Brain O Vision Solutions India Pvt. Ltd
7. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things" from 07-05-2020 to 11-05-2020 at NIT JAMSHEDPUR.
8. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 11-05-2020 to 15-05-2020 at Motilal Nehru National Institute of Technology Allahabad.
9. One-week Faculty Development Programme on “Data Science with R” organized by Electronics and ICT Academy, NIT Patna held from 27th April to 03rd May, 2020
10. One Week Faculty Development Programme on “Artificial Intelligence with IBM Watson” organized by AITS, Rajampet, 2nd – 7th December 2019.
11. One Week AICTE recognized Short Term Course on “Artificial Intelligence & Optimization through ICT” conducted by National Institute of Technical Teachers Training and Research, Chandigarh from 21st January to 25th January 2019.
12. Organized Five-day Online Faculty Development Program on “Impact of Internet of Things on Society (IITS – 2020)” Conducted by AITS, Rajampet from 25th to 29th May 2020.
13. Organized AICTE Sponsored Two Weeks Faculty Development Programme on “Big Data Analytics and Machine Learning” conducted by AITS, Rajampet from 18th to 30th November 2019.
14. Organized AICTE approved FDP on Pedagogy for Online and Blended Teaching-Learning Process conducted by IIT, Bombay from 3rd May 2018 to 30th May 2018.
15. Organized AICTE approved FDP on Foundation Program in ICT for Education conducted by IIT, Bombay from 08th March 2018 to 12th April 2018.
16. Organized Two Day Saptahaant Shikshak Prashikshan on Introduction to Machine Learning conducted by

- IIT, Kharagpur from 16th December 2017 to 17th December 2017.
17. Organized Two Week ISTE STTP on Pedagogy for Online and Blended Teaching-Learning Process conducted by IIT, Bombay from 14th September 2017 to 30th December 2017.
 18. Organized Two Week ISTE STTP on Foundation Program in ICT for Education conducted by IIT, Bombay from 3rd August 2017 to 10th November 2017.
 19. Organized Two Week ISTE STTP on Electric Power System conducted by IIT, Kharagpur from 12th June 2017 to 15th July 2017.
 20. Organized Two Week ISTE STTP on CMOS, Mixed Signal and Radio frequency VLSI Design conducted by IIT, Kharagpur from 30th January 2017 to 4th February 2017.

Details of Journal Publications/
Conferences (**National and
International**)

International Journal

1. Ramana, Kadiyala, Rajanikanth Aluvalu, Vinit Kumar Gunjan, Ninni Singh, and M. Nageswara Prasadhu. "Multipath Transmission Control Protocol for Live Virtual Machine Migration in the Cloud Environment." *Wireless Communications and Mobile Computing* 2022 (2022). <https://doi.org/10.1155/2022/2060875>
2. Singh, Ninni, Vinit Kumar Gunjan, Ramana Kadiyala, Qin Xin, and Thippa Reddy Gadekallu. "Performance Evaluation of SeisTutor Using Cognitive Intelligence-Based "Kirkpatrick Model"." *Computational Intelligence and Neuroscience* 2022 (2022). <https://doi.org/10.1155/2022/5092962>
3. A. Revathi, R. Kaladevi, Kadiyala Ramana, Rutvij H. Jhaveri, Madapuri Rudra Kumar, M. Sankara Prasanna Kumar, "Early Detection of Cognitive Decline Using Machine Learning Algorithm and Cognitive Ability Test", *Security and Communication Networks*, vol. 2022, Article ID 4190023, 13 pages, 2022. <https://doi.org/10.1155/2022/4190023>
4. R. Durga, E. Poovammal, Kadiyala Ramana, R. H. Jhaveri, S. Singh and B. Yoon, "CES Blocks—A Novel Chaotic Encryption Schemes-Based Blockchain System for an IoT Environment," *IEEE Access*, vol. 10, pp. 11354-11371, 2022, doi: 10.1109/ACCESS.2022.3144681.
5. Babu, J. Chinna, Nuka Mallikharjuna Rao, Kadiyala Ramana, and Vidhyacharan Bhaskar. "A Dynamic Hybrid Decoder Approach Using EG-LDPC Codes for Signal Processing Applications." *Wireless Personal Communications* 122, no. 2 (2022): 1435-1454. <https://doi.org/10.1007/s11277-021-08956-5>
6. Prashanth, Duddela Sai, R. Mehta, Kadiyala Ramana, and Vidhyacharan Bhaskar. "Handwritten Devanagari Character Recognition Using Modified Lenet and Alexnet Convolution Neural Networks." *Wireless Personal Communications* 122, no. 1 (2022): 349-378. <https://doi.org/10.1007/s11277-021-08903-4>
7. Amutha Balakrishnan, Ramana Kadiyala, Gaurav Dhiman, Gokul Ashok, Sandeep Kautish, Kusum Yadav, J. Maruthi Nagendra Prasad, "A Personalized Eccentric Cyber-Physical System Architecture for Smart Healthcare", *Security and Communication Networks*, vol. 2021, Article ID 1747077, 36 pages, 2021. <https://doi.org/10.1155/2021/1747077>
8. Amutha Balakrishnan, Kadiyala Ramana, Gaurav Dhiman, Gokul Ashok, Vidhyacharan Bhaskar, Ashutosh Sharma, Gurjot Singh Gaba, Mehedi Masud, Jehad F. Al-Amri, "Multimedia Concepts on Object Detection and Recognition with F1 Car Simulation Using Convolutional Layers", *Wireless Communications and Mobile Computing*, vol. 2021, Article ID 5543720, 21 pages, 2021. <https://doi.org/10.1155/2021/5543720>
9. Medabalimi S. Rao, Bodireddy E. Reddy, Ramana Kadiyala, Kottapalli Prasanna, and Saurabh Singh "Texture classification using Minkowski distance measure-based clustering

- for feature selection," *Journal of Electronic Imaging* 31(4), 041204 (17 November 2021). <https://doi.org/10.1117/1.JEI.31.4.041204>
10. Balakrishnan, Amutha, Kadiyala Ramana, Karthick Nanmaran, Manikandan Ramachandran, Vidhyacharan Bhaskar, and Suresh Kallam. "RSSI based localization and tracking in a spatial network system using wireless sensor networks." *Wireless Personal Communications* (2021): 1-37. <https://doi.org/10.1007/s11277-021-09161-0>
 11. B. Sowmiya, E. Poovammal, Kadiyala Ramana, S. Singh and B. Yoon, "Linear Elliptical Curve Digital Signature (LECDs) With Blockchain Approach for Enhanced Security on Cloud Server," in *IEEE Access*, vol. 9, pp. 138245-138253, 2021, <https://doi.org/10.1109/ACCESS.2021.3115238>
 12. Cherian, Aswathy K., Eswaran Poovammal, Ninan S. Philip, Kadiyala Ramana, Saurabh Singh, and In-Ho Ra. 2021. "Deep Learning Based Filtering Algorithm for Noise Removal in Underwater Images" *Water* 13, no. 19: 2742. <https://doi.org/10.3390/w13192742>
 13. Kranthi Kumar Singamaneni, Kadiyala Ramana, Gaurav Dhiman, Saurabh Singh, and Byungun Yoon. 2021. "A Novel Blockchain and Bi-Linear Polynomial-Based QCP-ABE Framework for Privacy and Security over the Complex Cloud Data" *Sensors* 21, no. 21: 7300. <https://doi.org/10.3390/s21217300>
 14. G. Suseela, Y. A. V. Phamila, G. Niranjana, Kadiyala Ramana, S. Singh and B. Yoon, "Low Energy Interleaved Chaotic Secure Image Coding Scheme for Visual Sensor Networks Using Pascal's Triangle Transform," in *IEEE Access*, vol. 9, pp. 134576-134592, 2021, <https://doi.org/10.1109/ACCESS.2021.3116111>
 15. Obulesu, O., Suresh Kallam, Gaurav Dhiman, Rizwan Patan, Ramana Kadiyala, Yaswanth Raparathi, and Sandeep Kautish. "Adaptive Diagnosis of Lung Cancer by Deep Learning Classification Using Wilcoxon Gain and Generator." *Journal of Healthcare Engineering* 2021 (2021). <https://doi.org/10.1155/2021/5912051>
 16. Prasanna, K., Kadiyala Ramana, Gaurav Dhiman, Sandeep Kautish, and V. Deeban Chakravarthy. "PoC Design: A Methodology for Proof-of-Concept (PoC) Development on Internet of Things Connected Dynamic Environments." *Security and Communication Networks* 2021 (2021). <https://doi.org/10.1155/2021/7185827>
 17. C. Jothikumar, Kadiyala Ramana, V. Deeban Chakravarthy, Saurabh Singh, In-Ho Ra, "An Efficient Routing Approach to Maximize the Lifetime of IoT-Based Wireless Sensor Networks in 5G and Beyond", *Mobile Information Systems*, vol. 2021, Article ID 9160516, 11 pages, 2021. <https://doi.org/10.1155/2021/9160516>
 18. G. Kothai, E. Poovammal, Gaurav Dhiman, Kadiyala Ramana, Ashutosh Sharma, Mohammed A. AlZain, Gurjot Singh Gaba, Mehedi Masud, "A New Hybrid Deep Learning Algorithm for Prediction of Wide Traffic Congestion in Smart Cities", *Wireless Communications and Mobile Computing*, vol. 2021, Article ID 5583874, 13 pages, 2021. <https://doi.org/10.1155/2021/5583874>
 19. S.Suraj Kamal, N.Penchalaiah, Kadiyala Ramana, "Control Toxic Waste by using Wireless Sensors, Arduino and Connecting Chip", *Journal of Interdisciplinary Cycle Research*, Volume 12, Issue 5, May 2020, PP. 1184-1190 (ISSN 0022-1945)
 20. D. Naga Maheswari, C. B. Sujitha, Kadiyala Ramana, "Routing Optimization in SDN using Deep Reinforcement Learning", *Journal of Engineering, Computing and Architecture*, Volume 10, Issue 5, May 2020, PP. 40-47 (ISSN 1934-7197)
 21. N.Penchalaiah, Kadiyala Ramana, Rajesh Mallela, "Energy Efficient Communication Approach towards the Green Internet of Things", *Journal of Information and Computational Science*, Volume 10, Issue 4, April 2020, PP. 116-127 (ISSN 1548-7741)
 22. Kadiyala Ramana and M.Ponnaivaikko, "AWSQ: An Approximated Web Server Queuing Algorithm for Heterogeneous Web Server Cluster", *International Journal of Electrical and Computer Engineering*, Volume 9, Issue 3, June 2019. ISSN 2088-8708 <http://doi.org/10.11591/ijece.v9i3.pp2083-2093> [Scopus Indexed]
 23. Kadiyala Ramana and M.Ponnaivaikko, "A Multi-Class Load Balancing Algorithm (MCLB) for Heterogeneous Web Cluster", *Studies in Informatics and Control*, ISSN 1220-1766, vol. 27(4), pp. 443-452, 2018. <https://doi.org/10.24846/v27i4y201808> [Scopus Indexed, SCIE Indexed]
 24. Rajesh Mallela, Pidugu Nagendra, Kadiyala Ramana, "Internet of Things – Future Internet Technologies, Elements and Applications", *International Journal of Research and Analytical*

- Reviews, Volume 5, Issue 4, October-2018, PP. 960-967 (ISSN 2348-1269)
25. Kadiyala Ramana, M.Ponnaivaikko and A.Subramanyam, "NDLB: Nearest Dispatcher Load Balancing Approach for Web Server Cluster", *Helix – The Scientific Explorer*, ISSN 2319-5592, Volume 8, Issue 1 (2018) pp 3023-3030 <https://doi.org/10.29042/2018-3023-3030> [ESCI Indexed]
 26. Kadiyala Ramana and M.Ponnaivaikko, "Content Aware Request Distribution Policies in Web Clusters: A Survey", *Journal of Advanced Research in Dynamical and Control Systems*, Volume 9, Special Issue 18 (2017) pp 2765-2779. [Scopus Indexed] IF – 0.16 SNIP – 0.135
 27. Rajesh Mallela, K.Suresh, Kadiyala Ramana, M.Subba Rao, "Reducing Power Consumption at Computer Architectures to Improve the Performance", *International Journal of Scientific & Engineering Research*, Volume 7, Issue 3, March-2016, PP. 235-241 (ISSN 2229-5518)
 28. Kadiyala Ramana and Dr.M.Ponnaivaikko, "Web Cluster Load Balancing Techniques: A Survey", *International Journal of Applied Engineering Research*, Vol.10, No.19, October 2015, PP. 39983-39998 (Print: ISSN 0973-4562 & Online: ISSN 1087-1090)

International /National Conferences

1. Deeban Chakravarthy, KLNC Prakash, Kadiyala Ramana, Thippa Reddy Gadekallu, "A Novel DDOS attack detection and prevention using DSA-DPI Method", *International Conference on Innovative Computing and Communication*, organized by organized by Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India in association with National Institute of Technology Patna, India and Korea Institute of Digital Convergence, South Korea and University of Valladolid, Spain on 19th - 20th February, 2022.
2. Kadiyala Ramana and L.Kalyani, "Analysis of Network Traffic and Dynamic Load Balancing using Software Defined Networks", *2nd International Conference on Cognitive Informatics and Soft Computing*, organized by Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, 09-10 April 2019.
3. Kadiyala Ramana and Dr.M.Ponnaivaikko, "GDLB: Global Dispatcher Load Balancing approach for Web Server Cluster", *1st International Conference on Communications and Cyber Physical Engineering*, organized by CMR Institute of Technology, Hyderabad, 24-25 January 2018.
4. K.Ramana, M.Ponnaivaikko, "Content Aware Request Distribution Policies in Web Clusters : A Survey", *National Conference on Research Trends in Engineering & Technology*, organized by TechFluent Solutions Pvt. Ltd., 6th March 2017.