

Name of Faculty: Dr. Kolla Morarjee

Designation: Associate Professor

Nature of Job/Appointment: Regular



Date of Joining: 04-02-2021

E-mail: morarjeek_cse@cbit.ac.in

Education Qualifications:	Name of the Degree	Class
Ph. D	Doctor of Philosophy (CSE)	Awarded
PG	M. Tech. (CSE)	First
UG	B. Tech. (CSE)	Second
Work Experience:		
Teaching	16 Years	
Research	10 years	
Industry	--	
Others	--	
Area of Specialization:	Deep Learning, Machine Learning, Image Processing, Artificial Intelligence	
Professional Memberships:	1. Senior Member, IEEE [96556239] 2. Life Member, CSI [11503993] 3. Member, IAENG [126113] 4. Member, ACM [4834277]	
Responsibilities held at Institution Level:	Research Coordinator-CSE	
Responsibilities held at Department Level:	M. Tech. Coordinator-CSE DRC Convener-CSE	
Research Guidance:	-	
Awards Received:	NPTEL Discipline Star July-December 2025	
Courses Handled at Under Graduate / Post Graduate Level	Operating Systems, Computer Organization, Data Warehousing and Data Mining, Semantic Web and Social Networks, Data Mining and Analytics, Social Media Intelligence, Soft Computing, Neural Networks and Deep Learning, Artificial Intelligence and Machine Learning, Natural Language Processing, Deep Learning	
No. of Papers Published	National Journals – 00	International Journals – 31
	National Conferences – 03	International Conferences – 19
Projects Carried out	Completed Collaborative Research Project as a Principal Investigator funded by TEQIP-III, JNTUH entitled, " Early Detection of Diabetic Retinopathy using Deep Representations with Binary CNN and Data Augmentation" with the worth of Rs. 2,89,500/-.	

Details of Patents:

1. Title of the invention: Early Detection of Diabetic Retinopathy using Deep representations with Binary CNN and Data Augmentation

Application No.202041055763

Name of Inventors:

- 1) Dr. T Venugopal,
- 2) Dr. Kolla Morarjee

Patents

2. Internet of Things based Smart Blind Assistive System using Multiple Cameras and Sensors.

Application No. 202541058572

Name of Inventors

- 1) Kolla Morarjee
- 2) Raman Dugyala
- 3) Harish Akula
- 4) DurgaPrasad
- 5) China Ramu Sampathirao

Technology Transfer
Invited Speaker

1. Session Chair for Springer International Conference on Computational Intelligence in Machine Learning, ICCIML 2021 Hyderabad, June 01st – 02nd, 2021, CMRCET, Hyderabad
2. Resource person for the lecture session on “Deep Learning-Image Processing” organized by JNTUH-UGC HRDC, A One Week Online Short-Term Course on “Machine Learning” on 20-03-2021.
3. Resource person for the lecture session on “Deep Learning for IoT” Organized by JNTUH-UGC HRDC, A Two-Week Online Refresher Course on “Internet of Things” on 23-08-2021
4. Resource person for the lecture session on “Deep Learning” Organized by JNTUH-UGC HRDC, A Two-Week Online Refresher Course on “Artificial Intelligence” on 26-05-2022
5. Session Chair for Springer International Conference ICCIC 2022 Hyderabad, December 27th – 28th 2022, VCE, Hyderabad.
6. Session Chair for Springer International Conference ICMISC 2025, March 28th – 29th 2025, CMRIT, Hyderabad.

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

1. Attended Three-week Refresher course on “Speech and Image Processing”, at UGC-ASC, JNTUH from 08/11/2010 to 29/11/2010.
2. Attended Three-week Refresher course on “Open-Source Software in academic Institutions”, at UGC-ASC, JNTUH from 04/02/2011 to 10/03/2011.
3. Attended Four-week Orientation course on “20th Orientation Course” at UGC-ASC, JNTUH from 25/04/2011 to 21/05/2011.
4. Organized Three Day Program on “Entrepreneurship Awareness Camp”, Sponsored by EDC JNTUH and EDII under DST-NIMAT 2014-15 at CMRIT, Hyderabad from 21/12/2015 to 23/12/2015.
5. Attended Three-week Refresher course on “Data Mining Techniques”, at UGC-ASC, JNTUH from 17/10/2016 to 05/11/2016.
6. Attended One-week Summer School on “Computer Vision”, at IIITH, Hyderabad from 03/07/2017 to 08/07/2017.
7. Attended One-week Summer School on “Machine Learning”, at IIITH, Hyderabad from 10/07/2017 to 15/07/2017.
8. Organizing Member for Springer International Conference on Data Sciences Machine Learning and Applications, CMRIT, March 2019.
9. Organized Six-week Technology Based Entrepreneurship Development Program on “Renewable Energy”, Sponsored by EDC JNTUH and EDII under DST-NIMAT 2018-19 at CMRIT, Hyderabad from 16/12/2019 to 31/01/2020.

10. Attended Online FDP on "Php and MySQL ", Organized by JNTUHCCEJ and Spoken tutorial IIT, Bombay from 18/05/2020 to 23/05/2020.
11. Attended Online FDP on "Emerging Research Trends in Computer Science and IT ", Organized by BVICAM, New Delhi from 08/06/2020 to 19/06/2020.
12. Attended Online FDP on "Data Science ", Organized by TASK and Excelr from 01/07/2020 to 24/07/2020.
13. Attended One-Month Online Summer School on "Artificial Intelligence ", at IIITH, Hyderabad from 02/08/2021 to 31/08/2021.
14. Attended AICTE ATAL FDP on "High Performance Computing for Data Intensive and Complex AI applications ", at CBIT, Hyderabad from 02/12/2024 to 07/12/2024.

Details of Journal Publications/ Conferences (National and International)

International/National Journals:

1. Mallellu, Sai & Maheswari, V. & Patil, Anitha & Kolla, Morarjee & Balaji, Prasanalakshmi & Alsidd, Linda. "Explainability and interpretability in AI: Bridging the gap between accuracy and transparency", Journal of Information & Optimization Sciences. 46. 1963-1971, (2025). 10.47974/JIOS-2025. WoS (ESCI) Indexed.
2. Kolla, Morarjee, Praveena Bai Desavathu, , K. Narayana Rao, And Nalla Siva. "Internet of Things Consumer Electronics Cybersecurity Approach Based On Deep Learning." Journal of Theoretical and Applied Information Technology 103, No. 14 (2025). Scopus Indexed.
3. Kolla, Morarjee, Srinivasa Rao Buraga, Subhash Bhagavan Kommina, J. Kavitha, Nitya Ramireddy, And Sreemukhi Savalge. "Tritag Recommender: A Hybrid Approach to Stack Overflow Tag Prediction Using Transformers and Keyword Extraction." Journal of Theoretical and Applied Information Technology 103, No. 11 (2025). Scopus Indexed.
4. Morarjee Kolla, Rupesh Kumar Mishra, S Zahoor ul Huq, Y Vijayalata, M Venugopalachari, Kazy Noor-e-Alam siddiquee, "*CNN based Brain Tumor Detection Model using Local Binary Pattern and Multi Layered SVM classifier*", Journal of Computational Intelligence and Neuroscience, Wiley & Hindawi 2022. SCIE, Scopus, Web of Science Indexed.
5. M. Venugopalachari, Morarjee Kolla, Rupesh Kumar Mishra, and Zarin Tasneem. "*Design and Implementation of Brain Tumor Segmentation and Detection Using a Novel Woelfel Filter and Morphological Segmentation*", Journal of Complexity, Wiley & Hindawi 2022. SCIE, Scopus, Web of Science Indexed.
6. Hemalatha Eedi, Morarjee Kolla, "Machine Learning Approaches for Healthcare Data Analysis", pp 806-811, Vol. 7, Issue 4, Journal of Critical Reviews, 2020, Scopus Indexed, ISSN: 2394-5125.
7. Amani,R., K.Morarjee, and D.Baswaraj, "Assumption Dynamics-Based Group Recommender Systems", pp. 2953-2959, Vol. 8, Issue 12, International Journal of Management Technology and Engineering , December 2018, UGC Approved, ISSN: 2249-7455.
8. K. Swapna, K. Morarjee, Dr. D. Baswaraj, "Implementation of Keyword Query Suggestions on Document Proximity using LKS Framework and PA Algorithm", pp. 1479-1482, Vol. 8, Issue 7, International Journal of Management Technology and Engineering, July 2018, UGC Approved, ISSN: 2249-7455.
9. Kolla Morarjee, T VenuGopal, "Product Quantized Deep Embedding for Semantic Image Clustering", pp. 309-315, Vol. 6, Issue 3, International Journal of Research in Electronics and Computer Engineering (IJRECE) 2018, UGC Approved, ISSN: 2348-2281.
10. Kolla Morarjee, T VenuGopal, "Binary Quantized Deep Embedding for Semantic Image Clustering", Vol 119, No. 16, pp. 1171-1180, International Journal of Pure and Applied Mathematics(IJPAM) 2018, UGC Approved, Scopus Indexed, ISSN: 1311-8080.
11. Kolla Morarjee, T VenuGopal, "Semantic Image Clustering with Global Average Pooled Deep Convolutional Autoencoder", Volume 8(4), pp.3492-3497, Helix2018, Web of Science, ESCI Indexed, ISSN: 2319-5592.DOI 10.29042/2018-3561-3566.
12. Kolla Morarjee, T VenuGopal, "A Novel Approach for Semantic Image Clustering using Object Relation Network, Patterns of Relevance Feedback and Weight of Features", Volume 12, Number 22, pp. 12721-12727, International Journal of Applied Engineering Research (IJAER) 2017, UGC Approved, Scopus Indexed, ISSN: 0973-4562.
13. Rachri Jyothirmai, Kolla Morarjee, "A survey on Ontology based Human Disease Study", Vol.24, No.2, pp.92-94, IJCTT, June 2015, ISSN:2231-2803.
14. Anegu Janga Reddy, Kolla Morarjee, "A survey on Semantic Sensor Techniques", Vol.24, No.2, pp.89-91, IJCTT, June 2015, ISSN:2231-2803.
15. Oguri Siva, K.Morarjee, "Performance of Liable Subsets by Entrustment of Features", Vol.2, Issue 10, pp.1704-1708, IJARES, October 2014, ISSN:2347-9337.

16. P.Jagadesh,K. Morarjee,"A Prototype for Social TV by Utilizing Cloud Services",Vol.2, Issue 1,pp.215-220,IJTSR, September 2014, ISSN:2319-9245.
17. K. Morarjee, Bijam Mownika,"Categorising Web Search Results from Search Engine Logs", Vol.5, pp.6472-6474, IJCSIT, 2014, ISSN:0975-9646.
18. G.Praveen Kumar, K.Morarjee,"Qos Ranking Prediction for Cloud Services from the Past Service Usage Experiences",Vol.2, Issue 9,pp.22-25,IJCSE,September,2014, E-ISSN:2347-2693.
19. BollaSaikiran, KollaMorarjee," An Efficient Algorithm for Update Scheduling in Streaming Data Warehouses", IJCSIT,Vol.5(2), 2014,PP. 1082-1085, ISSN:0975-9646.
20. BollaSaikiran, KollaMorarjee," A Survey on Streaming Data Warehouses", IJREAT, Vol.2, Issue 1, Feb-Mar,2014,PP.1-5, ISSN:2320-8791.
21. G.Dileep Kumar, KollaMorarjee," Insider Data Theft Detection using Decoy and User Behaviour profile",IJRCAR, Vol.2,Issue 2, February 2014, pp. 51-55,ISSN:2320-7345.
22. G.Dileep Kumar, KollaMorarjee," Survey on Insider Data Theft Misuse Attacks in the Cloud",IJCSMA, Vol.2, Issue 2,February 2014, PP. 26-29,ISSN:2321-8363.
23. KatragaddaSrinivasaRao, KollaMorarjee," Survey on Document Clustering", ZIJMR, Vol.4(1), January 2014, ISSN:2231-5780.
24. SadakMurali, KollaMorarjee," A Novel Mining Algorithm for High Utility Itemsets from Transactional Databases", GJCST, Vol.13,Issue 11,2013, Online ISSN:0975-4172 & Print ISSN:0975-4350.
25. SadakMurali, KollaMorarjee," A Survey on Efficient Algorithm for Mining High Utility Itemsets",IJREAT, Vol.1,Issue 5, Oct-Nov 2013, ISSN:2320-8791.
26. K Morarjee, Santhosh Kumar Eruventi, D. Baswaraj, A. Vasanthi, "A Novel Approach to Compute Semantic Relationship Between Words", International Journal of Research in Engineering & Advanced Technology, Vol.1, Issue.2, April-May-2013, PP. 1-5, ISSN: 2320-8791.
27. Santhosh Kumar Eruvent, K. Morarjee, P. Pavan Kumar, "Using Text Snippets Extract F-Score Correlation Community Results", International Journal of Communication and Engineering, Vol. 3, Issue 3, November 2012, PP. 162-167, ISSN: 0988-0382E.
28. G. Anil Goud, K. Morarjee, "Finding Bugs in Dynamic Web Applications Using Concrete and Symbolic Execution", International Journal of Computer Science and Information Technologies, Vol. 3(6), 2012, PP. 5454-5461, ISSN: 0975-9646.
29. P. Sreedhar Reddy, K. Morarjee, P. Pavan Kumar, "Falcons Concept Search: A Practical Exploring Engineering for Net Ontologies", International Journal of Computer Science and Information Technologies, Vol. 3(6), 2012, PP. 5476-5481, ISSN: 0975-9646.
30. P. Sreedhar Reddy, K. Morarjee, P. Pavan Kumar, "Extraction of Margin Results using Feedback Learning Techniques & Ontologies", International Journal of Communication and Engineering, Vol. 3, Issue 3, November 2012, PP. 180-185, ISSN: 0988-0382E .
31. G. Anil Goud, K. Morarjee, P. Pavan Kumar, "Using Interpreter extract the symbolic Bugs Identification", International Journal of Communication and Engineering, Vol. 3, Issue 3, November 2012, PP. 01-06, ISSN: 0988-0382E.

International /National Conferences:

1. Kolla, Morarjee, Vemula Ishitha Reddy, and Rddhi Reddy. "35 A Framework for Patient Specific Drug Recommendation and Side-Effect Prediction System.", ICPEST 2024,Power Energy and Secure Smart Technologies (2025): 31. DOI: 10.1201/9781003661917-35. Scopus Indexed.
2. Bathula, Vamshi Krishna, Rajavardhan Pagidipala, and Morarjee Kolla. "Sentiment-Based Recommendation System for YouTube Comments." In *International Conference on Information and Management Engineering*, pp. 15-23. Singapore: Springer Nature Singapore, 2023. DOI: 10.1007/978-981-97-9262-7_2. Scopus Indexed.
3. Harshavardhan Reddy, V. S. K., Vikas Swagath Rapelly, and Morarjee Kolla. "Analysing Twitter Data for Election Result Prediction." In *International Conference on Information and Management Engineering*, pp. 25-36. Singapore: Springer Nature Singapore, 2023. DOI: 10.1007/978-981-97-9262-7_3. Scopus Indexed.
4. Komal Adithya Reddy, B., Mohammad Sohail, and Morarjee Kolla. "Bus Route Detection Using YOLOv4 and PaddleOCR." In *International Conference on Information and Management Engineering*, pp. 1-13. Singapore: Springer Nature Singapore, 2023. DOI: 10.1007/978-981-97-9262-7_1. Scopus Indexed.
5. Harish Akula, Rayala, D., Morarjee Kolla, "Dynamic Game Difficulty Adjustment Based on Facial Emotion Recognition". In: Kumar, A., Gunjan, V.K., Hu, YC., Senatore, S. (eds) *Proceedings of the 4th International Conference on Data Science, Machine Learning and Applications. ICDSMLA 2022. Lecture Notes in Electrical Engineering*, vol 1038. Springer, Singapore. https://doi.org/10.1007/978-981-99-2058-7_22 Scopus Indexed.
6. Harish Akula, G Durga Prasad, Morarjee Kolla, "Assistive System for the Visually Impaired using Multiple Cameras and Sensors", DOI: 10.1109/ICCCMLA56841.2022.9989288, IEEE Conference ICCMLA 2022 Scopus Indexed.
7. Ahmed, Tariq, Aayush Shah, Morarjee Kolla, and Ramadevi Yellasi. "Reduction of Alert Fatigue using Extended Isolation Forest." In *2021 International Conference on Forensics, Analytics, Big Data, Security (FABS)*, vol. 1, pp. 1-5. IEEE, 2021, Scopus Indexed.
8. Morarjee Kolla, H V Ramana Rao, N Vijay Kumar, "Covid-19 Image Classification Techniques in Medical Analysis using Deep Representations", Presented in Springer 2nd International Conference on

- Manufacturing, Material Science and Engineering 2020, AIP Conf. Proc. 2358, pp.070008-1–070008 5,ISBN:978-0-7354-4114-9,https://doi.org/10.1063/5.0057943, Scopus Indexed.
9. N Vijay Kumar, Morarjee Kolla, H V Ramana Rao, "Amazon Review Classification and Sentimental Analysis on Mobile Products with R", Presented in Springer 2nd International Conference on Manufacturing, Material Science and Engineering 2020, AIP Conf. Proc. 2358, pp.110004-1–110004-6,ISBN:978-0-7354-4114-9 https://doi.org/10.1063/5.0057939, Scopus Indexed.
 10. H V Ramana Rao, N Vijay Kumar, Morarjee Kolla, "A Study on Machine Learning Approaches to Detect Credit Card Fraud", Presented in Springer 2nd International Conference on Manufacturing, Material Science and Engineering 2020, AIP Conf. Proc. 2358, pp. 00008-1–100008-5, ISBN:978-0-7354-4114-9 https://doi.org/10.1063/5.0057933, Scopus Indexed.
 11. Morarjee Kolla, T. Venugopal, "Efficient Classification of Diabetic Retinopathy using Binary CNN," IEEE International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), 2021, pp. 244-247, DOI: 10.1109/ICCIKE51210.2021.9410719. Scopus Indexed
 12. Morarjee Kolla, T. Venugopal, "Diabetic Retinopathy Classification using Lightweight CNN Model" Presented in Springer International Conference ICCCE 2021, April 9-10 2021, Scopus Indexed
 13. Morarjee Kolla, T. Venugopal, "Diabetic Retinopathy Classification using Binary CNN and Data Augmentation", Presented in Springer International Conference ICMISC 2021, March 2021. Scopus Indexed
 14. Morarjee Kolla, T. Venugopal, "Diabetic Retinopathy Classification Techniques in Medical Analysis using Deep Representations", Presented in Springer International Conference ICDSMLA 2020, December 2020 Scopus Indexed
 15. Morarjee Kolla, T. Venugopal, "Concatenated Global Average Pooled Deep Convolutional Embedded Clustering", presented in Springer International Conference ICDSMLA, March 2019, Published in Springer Lecture Notes in Electrical Engineering (LNEE), Volume 601, pp 778-786,2020,ISSN:1876-1100,ISBN:978-981-15-1419-7,https://doi.org/10.1007/978-981-15-1420-3_84, Scopus Indexed.
 16. KollaMorarjee, T Venu Gopal, "Region based Semantic Image Clustering using Positive and Negative Examples", Lecture Notes in Electrical Engineering (LNEE) 500, Springer, May 2018, DOI 10.1007/978-981-13-0212-1_75.Scopus Indexed, ISSN: 1876-1100.
 17. Kolla Morarjee, T VenuGopal, "Region based Semantic Image Retrieval using Ontology", pp.421-428 Lecture Notes in Networks and Systems (LNNS), Volume 5, Springer, April 2017, DOI 10.1007/978-981-10-3226-4_42, ISSN: 2367-3370.
 18. Kolla Morarjee, T.Venu Gopal," Semantic Image Clustering using Region based on Positive and Negative Examples", pp.261-264, ICICC, Feb 2015,ISBN:978-93-82163-59-6.
 19. KatragaddaSrinivasaRao, KollaMorarjee," Document Clustering: An Approach for Correlation Preserving Indexing Method",Proc. of National Conference on ACPR-14, Organized by JNTUHCEJ, Jagityal on 8-9 Jan., 2014.
 20. KollaMorarjee,T. Venugopal," A Survey on Image Clustering Techniques", Proc. of ICACM 2013,Organizer by GRIET, Hyderabad on 1-2 Aug., 2013.
 21. K. Morarjee, Dr. T. Venugopal, "Data mining: Understanding Disease Modeling ",Proc. of First National Conference on Communication, Networking and Mobile Computing (NCCMC), JNTUACE, Pulivendula 20th-21st Jan 2012.
 22. A. Vasanthi, P.L.S. Murthy, K. Morarjee, "Effective Multicasting for Secure group communication with low communication overhead.", Proc. of First National Conference on Communication, Networking and Mobile Computing (NCCMC), JNTUACE, Pulivendula, 20th-21st Jan 2012.

