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: Class Name of the Degree

Ph. D Doctor of Philosophy (CSE) Awarded PG M. Tech. (CSE) First

UG B. Tech. (CSE)

Work Experience:

Teaching 13 Years Research 10 years Industry

Others

Deep Learning, Machine Learning, Image Processing, Artificial Area of Specialization:

Intelligence

1. Senior Member, IEEE [96556239] 2. Life Member, CSI [I1503993]

Professional Memberships: 3. Member, IAENG [126113]

4. Member, ACM [4834277]

Research Coordinator-CSE

Invitee Member, BoS-CSE

Member CEG-CSE

Responsibilities held at Institution

Level:

Responsibilities held at Department

Level:

Research Guidance:

Awards Received:

Operating Systems, Computer Organization, Data Warehousing and

/ Post Graduate Level

No. of Papers Published

Projects Carried out

Data Mining, Semantic Web and Social Networks, Data Mining and Courses Handled at Under Graduate Analytics, Social Media Intelligence, Soft Computing, Neural Networks and Deep Learning, Artificial Intelligence and Machine

Second

Learning, Natural Language Processing

National Journals - 00 International Journals - 28

National Conferences – 03 International Conferences - 14

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:

 Title of the invention: H-Booking: Hotel Booking using Machine Learning

Application No.201941036118

Name of Inventors:

- 1) Dr. Kolla Morarjee,
- 2) Angotu Nageswara Rao
- 3) Amagoth Balaram
- 4) G Krishna Lava Kumar
- 2. 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
- Artificial Intelligence based System for Improving, Understanding Skills of Humanoid Robots through Implementing Neural Network.

Application No. 202221008505

Name of Inventors

- 1) Prof. Vinod Azad
- 2) Dr. Abhilasha Sharma
- 3) Prof. Brij Mohan Sharma
- 4) Dr. Rupesh Mishra
- 5) Dr. Kolla Morarjee
- 6) Prof. Kavita Agrawal

Technology Transfer Invited Speaker

Patents

1. Session Chair for First International Conference on Machine Learning and Applied Network Technologies, ICMLANT 2020

Hyderabad, Dec 20th – 21st, 2020, In association with IEEE Hyderabad Section and IEEE El Salvador Section

- 2. Session Chair for Springer International Conference on Computational Intelligence in Machine Learning, ICCIML
 - 2021 Hyderabad, June 01st 02nd, 2021, CMRCET, Hyderabad
- 3. Resource person for the lecture session on "Supervised Learning using DM Tools" organized by JNTUH-UGC HRDC, A One Week Online Short-Term Course on "Data Warehousing and Data Mining" on 09-01-2021.
- 4. 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.
- 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
- 6. 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
- Session Chair for Springer International Conference ICCIC 2022 Hyderabad, December 27th – 28th 2022, VCE, Hyderabad

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

- 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.
- 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 One-week FDP on "Machine Learning", at JNTUHCEH, Hyderabad from 11/04/2016 to 16/04/2016.
- Attended Three-week Refresher course on "Data Mining Techniques ", at UGC-ASC, JNTUH from 17/10/2016 to 05/11/2016.
- Attended One-week Summer School on "Computer Vision", at IIITH, Hyderabad from 03/07/2017 to 08/07/2017.
- 8. Attended One-week Summer School on "Machine Learning", at IIITH, Hyderabad from 10/07/2017 to 15/07/2017.
- Organizing Member for Springer International Conference on Data Sciences Machine Learning and Applications, CMRIT, March 2019.
- 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.
- 11. Attended Online FDP on "Php and MySQL", Organized by JNTUHCEJ and Spoken tutorial IIT, Bombay from 18/05/2020 to 23/05/2020.
- 12. 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.
- 13. Attended Online FDP on "Data Science", Organized by TASK and Excelr from 01/07/2020 to 24/07/2020.
- 14. Attended Online Workshop on "Building Data-Driven Solutions using Data Analytics with ML and DL Algorithms", Organized by CBIT, Hyderabad from 24/06/2021 to 28/06/2021.
- 15. Attended One-Month Online Summer School on "Artificial Intelligence ", at IIITH, Hyderabad from 02/08/2021 to 31/08/2021.

Details of Journal Publications/ Conferences (National and International)

International/National Journals:

- 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 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.
- **6.** 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.
- 7. 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.
- 8. 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.
- 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.
- 10. 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.
- 11. Anegu Janga Reddy, Kolla Morarjee," A survey on Semantic Sensor Techniques", Vol.24, No.2, pp.89-91,IJCTT, June 2015,ISSN:2231-2803.
- 12. 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.
- 13. 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.
- 14. K. Morarjee, Bijam Mownika," Categorising Web Search Results from Search Engine Logs", Vol.5, pp.6472-6474, IJCSIT, 2014, ISSN:0975-9646.
- 15. 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.
- 16. BollaSaikiran, KollaMorarjee," *An Efficient Algorithm for Update Scheduling in Streaming Data Warehouses*", IJCSIT,Vol.5(2), 2014,PP. 1082-1085, ISSN:0975-9646.
- 17. BollaSaikiran, KollaMorarjee," *A Survey on Streaming Data Warehouses*", IJREAT, Vol.2, Issue 1,Feb-Mar,2014,PP.1-5, ISSN:2320-8791.
- 18. 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.
- 19. 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.
- 20. KatragaddaSrinivasaRao, KollaMorarjee," *Survey on Document Clustering*", ZIJMR, Vol.4(1), January 2014, ISSN:2231-5780.
- 21. 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.
- 22. SadakMurali, KollaMorarjee," *A Survey on Efficient Algorithm for Mining High Utility Itemsets*",IJREAT, Vol.1,Issue 5, Oct-Nov 2013, ISSN:2320-8791.
- 23. 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.
- 24. Santhosh Kumar Eruvent, K. Morarjee, P. Pavan Kumar, "Using Text Snipps Extract F-Score Correlation Community Results", International Journal of Communication and Engineering, Vol. 3, Issue 3, November 2012, PP. 162-167, ISSN: 0988-0382E.
- 25. 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.
- 26. 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.
- 27. 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.
- 28. 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

International /National Conferences:

- 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 ICCCMLA 2022, Scopus Indexed.
- 2. Ahmed, Tariq, Aayush Shah, Morarjee Kolla, and Ramadevi Yellasiri. "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.
- 3. 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.
- 4. 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.
- 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.
- 6. 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
- 7. Morarjee Kolla, T. Venugopal, "Diabetic Retinopathy Classification using Lightweight CNN Model", Presented in Springer International Conference ICMISC 2021, March 2021. Scopus Indexed
- 8. Morarjee Kolla, T. Venugopal, "Diabetic Retinopathy Classification using Binary CNN and Data Augmentation", Presented in Springer International Conference ICMISC 2021, March 2021. Scopus Indexed
- 9. 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
- 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.

- 15. KollaMorarjee,T. Venugopal," A Survey on Image Clustering Techniques", Proc. of ICACM 2013,Organized by GRIET, Hyderabad on 1-2 Aug., 2013.
- 16. K. Morarajee, 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.
- 17. 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.