Name of Faculty	Dr. K. Radhika	
Designation	Professor & Head, AI&DS Dept.	
Nature of Job/Appointment	Regular	
Date of Joining	20-08-2001	
E-mail	Kradhika_aids@cbit.ac.in	

Education Qualifications	Name of the Degree	Class
Ph. D	Ph.D. (CSE) Osmania University, Hyderabad	Awarded
PG	M.Tech. (CS) JNTU, Hyderabad	First class with Distinction
UG	B.Tech. (EEE) VRSEC, Vijayawada	First Class

Work Experience	
Teaching	23 Years
Research	20 years
Industry	4 Years
Others	--

Area of Specialization	Mobile Computing, Information Security, Cloud Computing, Data Science, and Machine Learning
Professional Memberships	➤ IETE-Life Member(M-177237) ➤ ISTE-Life Member (LM33901) ➤ IACSIT-Life Member(80343494)
Responsibilities held at Institution Level	➤ Head-AI&DS Dept. From Jul 2024 to till date ➤ Chairperson- Women Development Cell, From Feb 2024 to till date ➤ Head, IT Department, From Jun 2020 to Feb 2023 ➤ NBA Coordinator from Nov 2017 to Jun 2021 ➤ Head, IT Department, CBIT from July 2015 to July 2017 ➤ Member, Staff Grievance Redressal Committee from Feb 2020 to till date ➤ Member, Internal Purchase Committee, From Feb 2023 to till date.
Responsibilities held at Department Level	➤ Head-AI&DS Dept. from Jul 2024 to till date ➤ Chairperson-BoS, From Jul 2024 to till date ➤ Member-BoS, From Mar 2023 to Jul 2024 ➤ Program Coordinator -UG-IT, From Jul 2022 - Feb 2023 ➤ Program Coordinator -UG, AI&DS, From Mar 2023 to till date
Research Guidance	Awarded-3, Guiding-4 scholars registered in Osmania University
Awards Received	➤ Received Best Researcher Award in the award ceremony of National Science Day Awards 2024.

Courses Handled at Under Graduate / Post Graduate Level.	➢ Data Analysis & Visualization using Python ➢ Operating Systems ➢ Information Security ➢ Data Analysis using R ➢ Digital Logic and Computer Architecture ➢ Data Communications ➢ Computer Networks ➢ Mobile Computing ➢ Programming for Problem Solving using C ➢ OOP using C++ ➢ OOP using Python ➢ Web Programming ➢ Advanced Computer Networks ➢ Ad-hoc and Sensor Networks ➢ Ethical Hacking ➢ Data Structures
No. of Papers Published	National Journals – International Journals – 25 National Conference – International Conference –15
Projects Carried out	➢ Principal Investigator for AICTE MODROB project Ref:F.No. 9-101/RIFD/MODROB/Policy-1/2016-17 sanctioned in 2017 and successfully completed in the year 2020.
Patents	➢ Published a patent on "A Sun Direction Aware Solar Panel with an AI enabled System for Optimal Performance", on 27/5/2022, Application No. 202241029227A, India. ➢ Published a patent on "Deep Learning Framework for Detection of Accidents in Low Quality CCTV Surveillance Videos in Tunnels", on 12/4/2024, Application No.202441027934 A.
Invited Speaker	➢ Delivered an expert talk on the topic "Introduction to Federated Learning" for the National Level One week Online Faculty Development Programme on *"Recent Trends in Data Science for Engineering"* organized by the department of Information Technology, CBIT on 30-06-2023. ➢ Session Chair for presentation session of the 3rd International Conference on Cognitive & Intelligent Computing (ICCIC-2023 organized during Dec 8-9, 2023 by the Department of Computer Science and Engineering, Vasavi College of Engineering, Hyderabad. ➢ Delivered a guest lecture on "Course Outcomes" in the Faculty Development Program organized by In-house Training Center, CBIT on27-11-2018 ➢ Session Chair for the "Computing" track in the 3rd International Conference on Computational Intelligence & Informatics (ICCII-2018) held during 28-12-2018 to 29-12-2018.
No. of Books/Chapter Published with details	**Book Chapters:** ➢ Published a book Chapter on "Food Supply Chain Management by Leveraging AI, IoT, and Blockchain Technologies", The Future of Agriculture: IoT, AI and Blockchain Technology for Sustainable Farming (2024). ➢ Kavuri, Radhika, and Satya kiranmai Tadepalli. "Introduction to Serverless Computing." *Serverless Computing Concepts, Technology and Architecture,* edited by Rajanikanth Aluvalu and Uma Maheswari V., IGI Global, 2024, pp. 1-19. https://doi.org/10.4018/979-8-3693-1682-5.ch001 ➢ Radhika Kavuri et al, "Quantum Cryptography with an Emphasis on the Security Analysis of QKD Protocols, Book Title: Evolution and Applications of Quantum Computing, Publisher: Scrivener Publishing ISBN: 9781119904861, 2023

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Training (Attended and/or Organized).	1. Participated in a Faculty Development Program on "Gen AI & Chat GPT Application in the Industry" organized during 27th to 31st Jan 2025 by CBIT in collaboration with ExcelR Edtech. Pvt. Ltd. 2. Participated in a Faculty Development Program on "Mastering AI and GPT: Unleashing the Power of Intelligent Automation" organized by National Institute of Electronics & Information Technology, Aurangabad Under Electronics & ICT Academy Phase-II Project. 3. Organized a One-Week National Level Faculty Development Program on "Multi-disciplinary Research Trends in AI and Data Science from 29th Jan to 2nd Feb 2024. 4. Participated in a one-week Faculty Development Program on "Quality Education through OBE" organized during Jan 22-27,2024 by the dept. of Information Technology in association with IEEE Education Society Student Branch Chapter, CBIT 5. Participated in a one-week Faculty Development Program on "Machine Learning Applications for Engineers" during 3rd to 7th by the dept. of Computer Science and Engineering, CBIT in Technical Association with ACM Hyderabad Deccan Chapter. 6. Participated in a 30 Hours International Faculty Development Program on "Deep Learning for NLP and Computer Vision" during 10th July to 28th July 2023 organized by CBIT in collaboration with ExcelR Edtech. Pvt. Ltd. 7. Participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020. 8. Organized a One-week FDP on "Outcome Based Education and NBA Accreditation Process (UG)" Organized by CBIT from 28- 05-2020 to 01-06-2020 9. Organized a One-week Short Term Training Program through ICT mode on "NBA Accreditation" from 22-04-2019 to 26-04-2019 at CBIT in association with NITTTR, Kolkata. 10. Completed 12 weeks NPTEL online certification on "NBA Accreditation and Teaching - Learning in Engineering (NATE)" in April 2020. 11. Participated in a one-week online Faculty Development Program on "Outcome Based Education: A Step Towards Excellence" from 11-05-2020 to 15-05-2020 under Margdarshan Scheme of AICTE, New Delhi. 12. Participated in the Online Course on "Examination Reforms" organized by AICTE during 22-04-2020 to 25-04-2020. 13. Participated in MEITY, Govt. of India sponsored One-week National Level Faculty Development Program (FDP) on "Machine Learning through Mathematical Modeling supported with Python & R-Soft", organized by the departments of M &H, CSE &IT of MGIT in collaboration with E&ICT Academy, NIT, Warangal from 02-07-2018 to 07-07-2018. 14. Participated in "Three Day Hands-on Workshop on VMware" held under TEQIP-III during 29-10-2018 to 31-10-2018 at Department of Computer Science and Engineering, University College of Engineering (A), Osmania University, Hyderabad.
Details of Journal Publications/ Conferences (National and International)	

1. presented the paper titled "A Comprehensive Analysisfor Federated Learning Approaches on Next Word Prediction" at the 1st International conference on Innovative Computing Technologies (ICICT-2024) held during 13-14 December 2024.

2. Prasad, K.S., Lydia, E.L., Rajesh, M.V. *et al.* Augmenting cybersecurity through attention based stacked autoencoder with optimization algorithm for detection and mitigation of attacks on IoT assisted networks. *Sci Rep* 14, 30833 (2024). https://doi.org/10.1038/s41598-024-81162-y

3. G. NaliniPriya, E. Laxmi Lydia, R. Alshenaifi, R. Kavuri and M. Khairi Ishak, "A Two-Tiered Bidirectional Atrous Spatial Pyramid Pooling-Based Semantic Segmentation Model for Landslide Classification Using Remote Sensing Images," in *IEEE Access*, vol. 12, pp. 181316-181331, 2024, doi: 10.1109/ACCESS.2024.3508881.

4. M. Karnati, P. Sai, R. K. Pittala, K. Radhika and K. Sugamya, "Deep Learning-Based Predictive Skin Disease Diagnosis and Analysis," *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)*, Chikkaballapur, India, 2024, pp. 1-6, doi: 10.1109/ICKECS61492.2024.10617139.

5. Dumpeti Naveen Kumar, Radhika Kavuri, "Hybrid Digital Certificate Management System with QR Code and IoT Integrated on Hyperledger Fabric Blockchain", Vol. 1 No. 1 (2024): Special Issue: International Conference of Advance Research and Innovation, pp. 635-646, https://doi.org/10.5750/ijme.v1i1.1392

6. S. Rama Sree, E. Laxmi Lydia, Mohammed Altaf Ahmed, K. Radhika et.al "Intelligent Multi-Group Marine Predator Algorithm With Deep Learning Assisted Anomaly Detection in Pedestrian Walkways," in *IEEE Access*, vol. 12, pp. 72662-72671, 2024, doi: 10.1109/ACCESS.2024.3403549.

7. Kavuri, R., Bangari, M., Yarram, H., Talari, H. (2024). Application of Artificial Intelligence on Camera-Based Human Pose Prediction for Yoga: A Methodological Study. In: Sharma, H., Chakravorty, A., Hussain, S., Kumari, R. (eds) Artificial Intelligence: Theory and Applications. AITA 2023. Lecture Notes in Networks and Systems, vol 843. Springer, Singapore. https://doi.org/10.1007/978-981-99-8476-3_8

8. Arvind T, K. Radhika, "XGBoost Machine Learning Model-Based DDoS Attack Detection and Mitigation in an SDN Environment," *International Journal of Engineering Trends and Technology*, vol. 71, no. 2, pp. 349-361, 2023. Crossref, https://doi.org/10.14445/22315381/IJETT-V71I2P237

9. N. K. Raja, E. L. Lydia, T. A. Acharya, K. Radhika, E. Yang and O. Yi, "Rider Optimization With Deep Learning Based Image Encryption for Secure Drone Communication," in *IEEE Access*, vol. 11, pp. 121646-121655, 2023, doi: 10.1109/ACCESS.2023.3324068.

10. Radhika, K., Alla, B.S.R., Mamidi, S.B., Puppala, N. (2023). A Review on Federated Learning-Based Network Intrusion Detection System. In: Kumar, A., Ghinea, G., Merugu, S. (eds) Proceedings of the 2nd International Conference on Cognitive and Intelligent Computing. ICCIC 2022. Cognitive Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-99-2742-5_72

11. Arvind, T., Radhika, K. (2023). An SDN-Based DDoS Traffic Generation, Collection and Classification Using Machine Learning Techniques. In: Venkata Rao, R., Taler, J. (eds) Advanced Engineering Optimization Through Intelligent Techniques. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-9285-8_39

12. Chenoori, R.K., Kavuri, R. (2022). GrFrauder: A novel unsupervised clustering algorithm for identification group spam reviewers. Ingénierie des systèmes d information, Vol. 27, No. 6, pp. 1019-1027. https://doi.org/10.18280/isi.270619

13. Chenoori, R.K., Kavuri, R. (2022). Online transaction fraud detection using efficient dimensionality reduction and machine learning techniques. Revue d'Intelligence Artificielle, Vol. 36, No. 4, pp. 621-628. https://doi.org/10.18280/ria.360415

14. Kammakomati, M., Tarun Kumar, P.V., Radhika, K. (2022). Comparison of Machine Learning Algorithms for Hate and Offensive Speech Detection. In: Suma, V., Fernando, X., Du, KL., Wang, H. (eds) Evolutionary Computing and Mobile Sustainable Networks. Lecture Notes on Data Engineering and Communications Technologies, vol 116. Springer, Singapore. https://doi.org/10.1007/978-981-16-9605-3_6

15. Vandana, L., Radhika, K. (2021). Detailed Review on Breast Cancer Diagnosis Using Different ML Algorithms. In: Reddy, K.A., Devi, B.R., George, B., Raju, K.S. (eds) Data Engineering and Communication Technology. Lecture Notes on Data Engineering and Communications Technologies, vol 63. Springer, Singapore. https://doi.org/10.1007/978-981-16-0081-4_52

16. Jyothsna, S., Radhika, K. (2020). Load Balancing in Cloud Through Multi Objective Optimization. In: Satapathy, S.C., Raju, K.S., Shyamala, K., Krishna, D.R., Favorskaya, M.N. (eds) Advances in Decision Sciences, Image Processing, Security and Computer Vision. Learning and Analytics in Intelligent Systems, vol 3. Springer, Cham. https://doi.org/10.1007/978-3-030-24322-7_38

17. Mandru Suma Sri, Dr. K. Radhika, "Machine Learning for Intrusion Detection: A review of Latest Approaches", High Technology Letters, Volume 27, Issue 2, Feb 2021

18. Kothakapu Jagadeeshwar Reddy, Manideep Chenna, Ragam Hari Haran, Dr. K. Radhika, "Bird Species Identification using CNN", High Technology Letters, Volume 27, Issue 1, Jan 2021

19. Radhika K., Latha Madhavi D. (2019). Machine learning model for automation of soil texture classification. Indian Journal of Agricultural Research. 53(1): 78-82. doi: 10.18805/IJARe.A-5053

20. Ch. Rathan Kumar, Dr. K. Radhika, "Timeline Based Trust Dissemination towards Review Spam Detection In Online Reviews", International Journal of Advanced Research in Engineering and

Technology (IJARET) Volume 11, Issue 12, December 2020, pp.1948-1956, ISSN Print: 0976-6480 and ISSN Online: 0976-6499, DOI: 10.34218/IJARET.11.12.2020.185 (Scopus Indexed)

21. Naveen Kumar Dumpeti and Dr. Radhika. Kavuri, "A framework to manage smart educational certificates and thwart forgery on a permissioned blockchain", International Conference on Research in Science, Engineering, Technology and Management-2020, Organized by Department of Computer Science and Engineering. Vaagdevi College of Engineering, Telangana , India, held on 28.12.2020.

22. Dr. K. Radhika, Balaji Phani Pranav Padala & S. Yadavendra Reddy, "Disease Diagnosis with Medical Prescription", Aegaeum Journal,Vol. 8, Issue 7,Jul 2020, pp.1092-1106.

23. Arvind, Dr. K. Radhika, "A Survey on Building an Effective Intrusion Detection System (IDS) using Machine Learning Techniques, Challenges and Datasets", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol 8, Issue 7, July 2020, pp.1473-1478.

24. D. Naveen Kumar, Dr. K. Radhika, "A Novel Consensus algorithm for Blockchain-based Personal Health Care Management", TEST Engineering & Management, Vol. 83, Issue May – June, 2020, pp.11343 - 11348

25. Dr. K. Radhika, Dr. K. Madhavi Latha, "Machine Learning model for Automation of Soil Texture Classification", Indian Journal of Agricultural Research (IJAR), Vol.53, Issue 1, Feb 2019, pp.78-82.

26. Jyothsna Sundaragiri, Dr. K.Radhika, "Secure VM Migration to Improve Load Balancing in Cloud Environment" Vol.5, Issue 8, Aug 2018,pp.500-509.

27. Ch. Rathan Kumar, Dr. K.Radhika, "Detection of Review Spam and Review Spammers Group", International Journal of Research in Electronics and Computer Engineering. 6, Issue 4,pp.1287-1292.

28. Dr. K. Radhika, G. Gayatri, "Graph Theory based Vertical Handoff Decision Model for Cognitive Radio Environments" in International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Volume 4, Issue 11, November 2016, pp.20155-20163.

29. Dr. K. Radhika, Ramya, "Personalized QoS based ranking approach for Cloud Service Selection" in International Journal of Computer Applications (IJCA), Volume 127, No.18, October 2015.

30. Dr. K. Radhika, Priyanka, "Effective Key Management for Remote Cooperative Groups" at International conference on Innovations in Computer Science and Information Technology (ICICSIT-2015) organized by MGIT during 28th& 29th August 2015.

31. Dr. K. Radhika, "Modeling and Analysis of SAW based Mobile Centric Vertical Handoff Decision", in International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE), Volume 5, Issue 5, May 2015, pp. 1139-1146.

32. K. Radhika, Dr. A.Venugopal Reddy, "Optimal Handoff Decision Method for Multi-Mode Terminals in Next Generation Wireless Networks", Proceedings of the 4th International Conference on Computer and Automation Engineering (ICCAE), organized during 14-15th , January 2012 at Mumbai, India and was published in ASME Digital Library.

33. K. Radhika, Dr. A. Venugopal Reddy and E.Sai Kumar presented a paper entitled "An efficient Vertical Handoff Decision Technique for Multi-Homed Mobile Terminals in Heterogeneous Wireless Networks", at the International Conference on Information Systems Design and Intelligent Applications-2012 (INCON INDIA 2012) organized during 5th - 7th, January 2012 by CSI, INDIA at Vizag.

34. K. Radhika, Dr. A. Venugopal Reddy, "Performance Analysis of Fuzzy MCDM and Game Theory Approaches for Vertical Handoff Decision Making", published as a full paper in the proceedings of International conference on Artcom -2012.

35. K. Radhika, Dr. A. Venugopal Reddy, "Vertical Handoff Decision Using Game Theory Approach for Multi-Mode Mobile Terminals in Next Generation Wireless Networks", in International Journal of Computer Applications (IJCA), Vol. 36, No.11, pp.31-37, December 2011.

36. K. Radhika, Dr. A. Venugopal Reddy, "AHP and Group decision Making for Access Network Selection in Multi-Homed Mobile Terminals", International Journal on Computer Science and Engineering(IJCSE), Vol.3, No.10, October 2011, pp.3412-3420.

37. K. Radhika, Dr. A. Venugopal Reddy, "An AHP Based Network Selection Algorithm for Heterogeneous Wireless Networks", International Journal of Computational Intelligence and Information Security (IJCIIS), Vol.2, No.8, August 2011, pp. 87-95.

38. K. Radhika, Dr. A. Venugopal Reddy, "Network Selection in Heterogeneous Wireless Networks Based on Fuzzy Multiple Criteria Decision Making", International journal of Computer Applications (IJCA), Vol.22, No.1, May 2011, pp. 7-10.

39. K. Radhika and A. V. Reddy, "Vertical handoff decision algorithm for heterogeneous wireless networks based on 2-level Analytic Hierarchy process," 2011 Annual IEEE India Conference, Hyderabad, India, 2011, pp. 1-6, https://doi.org/10.1109/INDCON.2011.6139384

40. K. Radhika and A. V. G. Reddy, "Network selection in heterogeneous wireless networks based on Fuzzy Multiple criteria Decision Making," 2011 3rd International Conference on Electronics Computer Technology, Kanyakumari, India, 2011, pp. 136-139, https://doi.org/10.1109/ICECTECH.2011.5942067