Name of Faculty	Dr. G. KIRAN KUMAR
Designation	Associate Professor
Nature of Job/Appointment	Regular
Date of Joining	8 – 11 - 2021
E-mail	gkiran_cse@cbit.ac.in

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

Work Experience

Teaching	22 Years
Research	--
Industry	--
Others	--
Area of Specialization	Competitive Coding, Data Mining, Machine Learning, Deep Learning, Social Networks
Professional Memberships	Member, IEEE, Computer Society of India - CSI, ISTE
Responsibilities held at Institution Level	--
Responsibilities held at the DepartmentLevel	--
Research Guidance	--
Awards Received	--
Courses Handled at Under Graduate / Post Graduate Level.	Formal Languages & Automata Theory, Compiler Design, Programming for Problem Solving, Data Structures, Discrete Mathematics, Java Programming, Operating Systems, Data Mining, Advanced Data Structures, Soft Computing, Object Oriented Programming Through Python
No. of Papers Published	National Journals – 00 International Journals – 23 National Conference – 00 International Conference – 20
Projects Carried out	--
Patents	1. G Kiran Kumar, D.Jayaram, B.Sateesh, A.Mohan, B Srinivasa S PKumar, Method and system to estimate food calorie with retinanetfeature extraction , o.202241034651 16/06/2022 , Published on 08/07/2022
Technology Transfer	--
Invited Speaker	1. Resource person for the Two-week Online Refresher Course on "Artificial Intelligence" held from 23-05-2022 to 04-06-2022 and delivered lecture session on "Artificial Neural Networks & Convolutional Neural Network" on 24.05.2022 (10.00 to 1.15 pm) at UGC — Human Resource Development Centre, JNTUH,Kukatpally, Hyderabad. 2. Resource person for a webinar on the topic "Concepts and applications of graph theory" organized of department of computer science and engineering, JNTUH University College of Engineering Manthani, held on 29th January 2022

3. Resource person for a Guest lecture on the topic "Competitive Programming" at Sphoorthy Engineering College on 09.04.2022

4. Resource person for the Two-week Online Refresher Course on "Artificial Intelligence" held from 09-11-2020 to 23-11-2020 and delivered lecture session on "Artificial Neural Networks & Network of Perceptrons" on 12.11.2020 (10.00 to 1.15 pm) at UGC — Human Resource Development Centre, JNTUH, Kukatpally, Hyderabad.

5. Acted as Judge in QUEST 2020 in conducting poster presentation held on 12th March , 2020 at JNTU Hyderabad

6. Created video recordings of the subject formal languages and Automata theory with help of virtulearn organization in a professional way.

7. Resource person for a slot in UGC-sponsored Two Weeks Refresher Course on "Artificial Intelligence and Machine Learning" (14-10-2019 to 26-10-2019) at JNTU , Hyderabad .

8. Resource person for Advanced Problem solving Techniques to STP(Special Training Program) at Haj-House

9. Resource person for CHSSC (computer Hardware and system software concepts) module and PF (programming fundamentals) in Fp- Infosys campus connect and successfully completed Three batches at MLR Institute of Technology.

10. Resource person for Unix and shell programming and CHSSC to STP (special Training program) at MLR Institute of technology and NIMSE, Yousufguda.

11. Resource person on " Theoretical computer science" conducted at Vasavi college of engineering on 9th December 2009 as part of IUCEE-FLI 2009

No. of Books/Chapter Published with details	Published a Book "Spatial Co-Location Pattern Mining", LAMBERT Academic Publishing, ISSN: 978-613-7-38153-3, 2018.
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/ Workshops. Other Trainings **(Attended and/or Organized).**	1. Successfully completed the AICTE-ISTE approved Orientation/Refresher Program on "Python Programming for 5G Communications" held during 14.02.2022 to 22.02.2022 organized by MLR Institute of Technology, Hyderabad. 2. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Recent Trends in Artificial Intelligence" from 29/11/2021 to 03/12/2021 at LAKSHMI NARAIN COLLEGE OF TECHNOLOGY. 3. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Exploring Machine Learning and Deep Learning Algorithms for Natural Language Processing (NLP) Applications" from 22/11/2021 to 26/11/2021 at Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering &Technology. 4. Participated as a delegate at seventh international conference on Transformations in Engineering Education(ICTIEE-2020) during 5th — 8th January 2020. 5. Successfully cleared assessment test and completed a hands on workshop on Artificial Intelligence and Deep Learning held at CMR College from 14.07.18 to 16.07.18 6. Attended FDP on Artificial Intelligence and Machine learning from 04.06.18 to 08.06.18 at NIT Warangal. 7. Attended FDP on Security and privacy from Jan 12th 2017 to Jan 18th 2017, at NIT Goa. 8. Attended 3rd International Conference on Transformations in Engineering Education (ICTIEE 2016) from January 8 to 12, 2016 in association with Indo-Us Collaboration for Engineering Education (IUCEE), Pune. 9. Attended two week FDP on "Machine Learning" at VR Siddhartha Engineering College, Organized by department of Information Technology from November 16 to 27 , 2015. 10. Attended workshop on "Awareness workshop on Outcome based education and Accreditation" at JNTUH, Hyderabad on 14th September 2015. 11. Attended workshop on "Outcome based education" at BMS College of Engineering , Bangalore, from 2nd and 3rd August 2015.

12. Attended FDP on "Research Trends in Computer Science & Engineering", Organized By Dept of Information Technology and Computer Science & Engineering at Vardhaman College of Engineering, Hyderabad during 5th - 11th January 2015.
13. Given a Key Note Speech and session chair in the International Conference on Emerging Trends in Engineering & Management - ICETEM 2k13 during November 29-30, 2013 at Sree Visvesvaraya Institute of Technology & Science, Mahabubnagar.
14. Attended workshop on data mining tool "Weka" at CSI office , Hyderabad, on 29th June and 30th June,2012
15. Attended 3 day workshop on Teaching Engineering using Matlab & Simulink At MLR Institute of Technology Conducted by IUCEE from 19.07.2011 to 21.07.2011.
16. Attended course on " Theory of computing" as part of Indo- US Engineering Faculty Leadership Institute from July 6 to July 10, 2009 at The Infosys Mysore center by Prof John Hopcraft.
17. Attended course on Effective Teaching ; Cooperating Learning ; Effective Faculty Development, outcome based Education , Quality and Accreditation as part (IUCEE) of Indo- US Engineering Faculty Leadership Institute from May 26 to May 28, 2008 at The Infosys Mysore center.
18. Attended Faculty Development Program(FEP) for special Training Program (STP) during 21-25 January 2008 conducted at Infosys ─ Hyderabad.
19. Successfully completed Half-a-Day FP restructuring session at Padmasri Dr. B.V Raju Institute of Technology, Medak On 29th July 2009.
20. Successfully completed a workshop on " High Impact teaching skills" on 17th and 18th November , 2008 conducted by Wipro-Mission 10X.
21. Successfully completed workshop on OOAD using UML with fundamentals of Rational rose from IBM during 9th August to 11th August ,2006.

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

Details of Conferences (National and International)

1. Kosaraju, Sai Sahithi, Manjusha Sunkara, G. Kiran Kumar, and M. Anila. "Enhancing crop health using deep learning techniques." In *2024 2nd International Conference on Artificial Intelligence and Machine Learning Applications Theme: Healthcare and Internet of Things (AIMLA)*, pp. 1-7. IEEE, 2024.
2. Kumar, G. Kiran, D. Malathi Rani, M. Venu Gopalachari, S. Rakesh, and Syed Ashraf. "Melanoma classification using convolutional neural network." In *AIP Conference Proceedings*, vol. 2754, no. 1. AIP Publishing, 2023.
3. Rakesh, S., M. Venu Gopalachari, and G. Kiran Kumar. "Automatic music genre classification using deep learning." In *AIP Conference Proceedings*, vol. 2754, no. 1. AIP Publishing, 2023.
4. Yeluri, Lakshmi Prasanna, I. V. S. L. Haritha, Jeethu Philip, and G. Kiran Kumar. "An approach towards sentiment analysis in social media using machine learning." In *AIP Conference Proceedings*, vol. 2492, no. 1. AIP Publishing, 2023.
5. Kumar, J. Pradeep, G. Kiran Kumar, P. Neelakanta Rao, Jeethu Philip, and M. Prashanth. "Speech emotion recognition for audio and text." In *AIP Conference Proceedings*, vol. 2492, no. 1. AIP Publishing, 2023.
6. Philip, Jeethu, Y. Lakshmi Prasanna, G. Kiran Kumar, and P. Neelakanta Rao. "S2S translator using CNN." In *AIP Conference Proceedings*, vol. 2492, no. 1. AIP Publishing, 2023.
7. Macharla, Anila, G. Kiran Kumar, and D. Malathi Rani. "Detection and classification of malicious URLs based on machine learning models." (2023): 27-32.
8. Kavati, Ilaiah, G. Kiran Kumar, M. Venu Gopalachari, E. Suresh Babu, Ramalingaswamy Cheruku, and V. Dinesh Reddy. "Non-invertible Cancellable Template for Fingerprint Biometric." In International Conference on Hybrid Intelligent Systems, pp. 615-624. Springer, Cham, 2021.
9. Kumar, G. Kiran, et al. "Prediction of House Price Using Machine Learning Algorithms." 2021 5th International Conference on Trends in Electronics and Informatics (ICOEI). IEEE, 2021.
10. Rao, E. Gurumohan, G. Anitha, and G. Kiran Kumar. "Plant Disease Detection using Convolutional Neural Networks." 2021 5th International Conference on Trends in Electronics and Informatics (ICOEI). IEEE, 2021.
11. Shareef, Sk Khaja, IV Sai Lakshmi Haritha, Y. Lakshmi Prasanna, and G. Kiran Kumar. "Deep Learning Based Hand Gesture Translation System." In 2021 5th International Conference on Trends in Electronics and Informatics (ICOEI), pp. 1531-1534. IEEE, 2021.
12. Kumar, G. Kiran. "Word Sense Disambiguation System for Information Retrieval in Telugu Language." Advanced Techniques for IoT Applications: Proceedings of EAIT 2020 292 (2021): 233.
13. Kumar, G. Kiran, et al. "Food Calorie Estimation System Using ImageAI with RetinaNet Feature Extraction." International Conference on Emerging Applications of Information Technology. Springer,

Singapore, 2021.

14. Kumar, G. Kiran, and D. Malathi Rani. "Paragraph summarization based on word frequency using NLP techniques." AIP Conference Proceedings. Vol. 2317. No. 1. AIP Publishing LLC, 2021.

15. Kumar, G. Kiran, et al. "Spatial co-location pattern mining using delaunay triangulation." Advances in Machine Learning and Data Science. Springer, Singapore, 2018. 95-102.

16. Kavati, Ilaiah, G. Kiran Kumar, and Koppula Srinivas Rao. "Fast Fingerprint Retrieval Using Minutiae Neighbor Structure." Advances in Machine Learning and Data Science. Springer, Singapore, 2018. 187-194.

17. Reddy, E. Amarnatha, Ilaiah Kavati, K. Srinivas Rao, and G. Kiran Kumar. "A secure railway crossing system using IoT." In 2017 International conference of Electronics, Communication and Aerospace Technology (ICECA), vol. 2, pp. 196-199. IEEE, 2017.

18. Reddy, G. Prabhakar, Y. Deepika, K. Sai Prasad, and G. Kiran Kumar. "Fuzzy Logics associated with neural networks in the real time for better world." Materials Today: Proceedings 4, no. 8 (2017): 8507-8516.

19. K I Chugh, G Kiran Kumar "Software Reliability Models- A comparative study" , International Conference on Innovations in Computer Science & Engineering(ICICSE-2013).

20. G Kiran Kumar, T VenuGopal, P Premchand , "A Novel Method of Modeling Spatial Co-Location patterns on spatial data", International Conference on Frontiers of Computer Science, IISc, Bangolre, 2011

Details of Journals (National and International)

1. Kiran Kumar, G., S. K Prashanth, E. Padmalatha, M. Venkata Krishna Reddy, N. Rama Devi, Laith Abualigah, Premkumar Chithaluru, and Manoj Kumar. "An optimized meta-heuristic clustering-based routing scheme for secured wireless sensor networks." *International Journal of Communication Systems* (2024): e5791.

2. Rasheed, Shagufta, G. Kiran Kumar, D. Malathi Rani, MVV Prasad Kantipudi, and M. Anila. "Heart Disease Prediction Using GridSearchCV and Random Forest." *EAI Endorsed Transactions on Pervasive Health and Technology* 10 (2024).

3. Anila, M., G. Kiran Kumar, D. Malathi Rani, MVV Prasad Kantipudi, and D. Jayaram. "An LSTM based DNN Model for Neurological Disease Prediction Using Voice Characteristics." *EAI Endorsed Transactions on Pervasive Health and Technology* 10 (2024).

4. Tumula, Sridevi, Y. Ramadevi, E. Padmalatha, G. Kiran Kumar, M. Venu Gopalachari, Laith Abualigah, Premkumar Chithaluru, and Manoj Kumar. "An opportunistic energy-efficient dynamic self-configuration clustering algorithm in WSN-based IoT networks." *International Journal of Communication Systems* 37, no. 1 (2024): e5633.

5. Terlapu, Panduranga Vital, K. Kishore Raju, G. Kiran Kumar, G. Jagadeeswara Rao, K. Kavitha, and Shirina Samreen. "Improved Software Effort Estimation Through Machine Learning: Challenges, Applications, and Feature Importance Analysis." *IEEE Access* (2024).

6. Rao, Kuncham Sreenivasa, Panduranga Vital Terlapu, D. Jayaram, K. Kishore Raju, G. Kiran Kumar, Rambabu Pemula, Venu Gopalachari, and S. Rakesh. "Intelligent ultrasound imaging for enhanced breast cancer diagnosis: Ensemble transfer learning strategies." *IEEE Access* (2024).

7. Kavati, Ilaiah, Venkatesh Akula, E. Suresh Babu, Ramalingaswamy Cheruku, and G. Kiran Kumar. "Complex Human Activity Recognition with Deep Inception Learning and Squeeze-Excitation Framework." Journal of Information Assurance & Security 17, no. 2 (2022).

8. Kumar, G. K., Gopalachari, M. V., Mishra, R., Jayaram, D., Rakesh, S., & Rani, D. M. (2022). Enabling effective location-based services for road networks using spatial mining. International Journal of Health Sciences, 6(S4). https://doi.org/10.53730/ijhs.v6nS4.9313

9. Jayaram, D., Gopalachari, M. V., Rakesh, S., Sai, J. S., & Kumar, G. K. (2022). Fake face image detection using feature network. International Journal of Health Sciences, 6(S5), 3027–3039. https://doi.org/10.53730/ijhs.v6nS5.9310

10. Kiran Kumar, G., D. Malathi Rani, and E. Guru Mohan Rao. "Fast palmprint retrieval using speed up robust features." Indian Journal of Science and Technology 13.31 (2020): 3204-3212.

11. Kiran Kumar, G., D. Malathi Rani "IoT Based Drip Irrigation System for Farming using Cloud Data" , International Journal of Recent Technology and Engineering (IJRTE) , Volume-8 Issue-6 , 711-715, 2020

12. Kiran Kumar, G , " An Empirical study of resource allocation in various aspects of cloud computing " , Journal of Advanced Research in Dynamical and Control Systems , Vol. 9, Issue 8 , 227-236 , 2017

13. Tetali, Dharma Reddy, Kiran Kumar, and Lakshmi Ramana. "A Python tool for evaluation of Subjective Answers (ApTeSa)." IJMET 8, no. 7 (2017): 247-255.

14. Kavati, Ilaiah, G. Kiran Kumar, Sarika Kesagani, and K. Srinivasa Rao. "Signboard Text Translator: A Guide to Tourist." International Journal of Electrical and Computer Engineering (IJECE) 7, no. 5 (2017): 2496-2501.

15. Kiran Kumar, G , "An efficient method for conducting online quiz using mobile application " , An efficient method for conducting online quiz using mobile application , Volume 6 Issue 4 , 296-300 , 2016.

16. Kumar, G. Kiran, C. B. Aishwarya, and A. Sai Mounika. "College Bus Tracking Android Application using GPS." International Journal of New Innovations in Engineering and Technology 4.4 (2016): 40-44.

17. G. Kiran Kumar, P. Ram Mohan Rao , "Multi layered approach for privacy preservation in smart devices " , Biohouse Journal of computer science , 1,Issue1, 6-9 , 2015

18. G. Kiran Kumar, P. Dayakar , "TDMA scheduling with wireless sensor networks " , Biohouse Journal of computer science , 1, Issue 2 , 9-11, 2015

19. Kumar, G. Kiran, T. Bala Chary, and P. Premchand. "A New and Efficient K-Means Clustering Algorithm." International Journal of Advanced Research in Computer Science and Software Engineering 3.11 (2013).

20. Kumar, G. Kiran, K. L. Chugh, and Sarita Choudhury. "Hierarchical Window Centric Method of Modeling Spatial Co-Location Patterns on Spatial Database." vol 3 (2013): 1132-1137.

21. G. Kiran Kumar, P. Premchand , "Extraction of High Prevalence based Co-Location patterns on Spatial Database Using a Combinational Approach" , Journal of data engineering and Computer Science, Grid,

2012 , 42-49 , 2012

22. Kumar, G. Kiran, and P. Premchand. "A Novel Hybrid Spatial Clustering Algorithm." International Journal of Engineering Research and Applications 2.3 (2012): 1746-1752.
23. Kumar, G. Kiran, P. Premchand, and T. Venu Gopal. "Mining of spatial co-location pattern from spatial datasets." International Journal of Computer Applications 42.21 (2012): 25-30.

NPTEL Certifications

1. Successfully completed the course Deep Learning with a consolidated score of 72% during July-Oct 2018
2. Successfully completed the course Discrete Mathematics with a consolidated score of 87% during Jan-April 2019
3. Successfully completed the course Introduction to Automata, Languages and Computation with a consolidated score of 88% during Jan-April 2019
4. Received certificate of appreciation for my role as SPOC for the SWAYAM-NPTEL Local Chapter during the year Jan-April 2019
5. Received certificate of appreciation for my role as SPOC for the SWAYAM-NPTEL Local Chapter during the year July-December 2019