

Name & Photo :	Dr.R.UMA 
Designation:	Professor
Qualification	<ul style="list-style-type: none"> ● B.E (EEE) at SRM Engineering College, Madras University -1996- FIRST CLASS ● M.E(CSE) at College of Engineering Guindy , Anna University – 2002- FIRST CLASS <p>Ph.D. Anna University 2020,Domain: Data Mining Title: A Novel Approach for Duplicate Elimination and Effective Topic Modeling for Document Clustering</p>
Experience :	Teaching : UG: 29 Years PG : 15Years Industry : - NIL
Publications	<p>Patents:</p> <p>Published : 3</p> <p>Book & Book Chapter : 15</p> <p>Journal:</p> <p>International : 41</p> <p>Conference:</p> <p>International : 25</p> <p>Indexed:</p> <p>SCI : 3</p> <p>SCOPUS : 38</p>

Professional Societies Membership	IEEE Senior Member-98092243, ISTE,IAENG, IACSIT, IFERP
General :	<p>Acted as Time Table Coordinator for CSE department</p> <p>Acted as ISO Coordinator for CSE department</p> <p>Acted as Symposium Coordinator</p> <p>Acted as Coordinator for International Conference ICICT'09 for CSE department</p> <p>Acted as Co-Convenor for International Conference on Computational Science ICCST'17 for CSE department</p> <p>Acted as overall NAAC Criteria 7 Head for the college and NBA Coordinator of CSE</p> <p>Taken part in setting Question papers for Anna University and Pondicherry Engineering College exams</p> <p>Certified in NPTEL course(Human Computer Interaction)</p> <p>Coordinated a Two Week Online Refresher Course On Recent Trends in Information, Computing,</p> <p>Coordinated QS-I QUAGE for the department(2023–24).</p> <p>Captain of Game Development Club</p> <p>Faculty Advisor for Google Developer Student Club(2021–2024).</p> <p>Department SCOPE member – Strategist</p> <p>Department R and D Coordinator</p>

BOOK CHAPTER DETAILS

- Published a Book Chapter in Handbook of Research on Deep Learning-Based Image Analysis Under Constrained and Unconstrained Environments, Chapter 9- Apple Leaf Disease Identification Based on Optimized Deep Neural Network, IGI GLOBAL PUBLISHER, DOI: **10.4018/978-1-7998-6690-9.ch009.**
- Published a Book Chapter in Handbook of Research on Investigation of Deep Fake Images Using Pre-Trained CNN Frameworks IGI GLOBAL PUBLISHER, DOI: <https://doi.org/10.4018/978-1-6684-4558-7.ch007>
- Published a Book Chapter Investigation of deep fake images using pre-trained CNN frameworks Aiding Forensic Investigation Through Deep Learning and Machine Learning Frameworks, IGI GLOBAL PUBLISHER ,2022, pp. 161–173

PATENT DETAILS

1. Filed an Indian patent titled "VIRTUAL REALITY BASED RECRUITMENT SYSTEM" on 24.11.20 **Application number :202041051030** Status –**PUBLISHED**

2. Filed an Indian patent titled "Micro Lecture Learning System Using Speech Recognition And Machine Learning" on 26/08/21 **Application number :.202141038679 A** Status –**PUBLISHED**

3. Filed an Indian patent titled "IoT Based Energy Management System in Micro grid Using Lorawan" on 27/10/21 **Application number :.202141049030** Status –**PUBLISHED**

BOOKS PUBLISHED

- Published a Textbook on "Programming with Java" , **ISBN 978-93-90548-36-1** Publisher Book Rivers
- Published a Book "Operating System Concepts", ASIN : B09SL12B8J , **ISBN :9798390316788**
- Published a Textbook" Artificial Intelligence", **ISBN 9798361887200.**
- Published a Textbook" Modern Machine Learning Techniques", **ISBN 9798377714927**
- Published a Textbook "Data Warehousing And Data Mining ", **ISBN :9798390316290**
- Published a Textbook "Essentials of Data Structures and Algorithms ", **ISBN :9789368848653**, Publisher Book Rivers

DC MEMBER

Part Time Research Scholar Mr.Inbaskaran .G (PA2133013013009) at SRM Institute of Science and Technology

Part Time Research Scholar Ms. Nehrurevathy (PA2233013013002) at SRM Institute of Science and Technology

Part Time Research Scholar Ms. V.Hema (2023191109) at Sathyabama Institute of Science & Technology

REVIEWER DETAILS

Evaluated a book chapter manuscript, "A deep learning based framework for accurate facial ethnicity classification and efficient query retrieval", for publication in Deep Learning-Based Image Analysis Under Constrained and Unconstrained Environments in IGI Global.

Reviewer in

- The Journal of Supercomputing.
- The Journal of Computer Communications
- Journal of Medical Systems
- International Journal of Bioinformatics Research and Applications.
- TPC Member during the International Conference on “Machine Intelligence and Data Science Applications (MIDAS-2020)” in association with Next Generation Computing Technology (NGCT) Society held on 4th-5th September 2020 at University of Petroleum and Energy Studies, Dehradun, Uttarakhand.

AWARD DETAILS

- Received best paper award for “**Diagnosing Stealth Dyslexia using Artificial Neural Networks**” in the Research Conference on Data and Decision Science-RCDDS’18 at SRM Institute of Science and Technology, Vadapalani, Chennai.
- Received best paper award for “**Machine Learning Architecture to Predict Server Performance**” in the 7th National Conference ICON’22 on Recent Trends in AI and Data Science at Dr.MGR Educational and Research Institute, Chennai.
- Received Innovative Project Award from CSI Kancheepuram for the project” A Deep Learning Based Detection and Classification of Gastrointestinal Diseases”

OUTSIDE WORLD INTERACTION

1. Contributed as a Question Paper Setter for various autonomous colleges.
2. Served as Session Chair in IFERP Conferences and several other academic conferences.
3. Delivered a Resource Person session in the ATAL FDP “*Beyond Limits: Exploring Supercomputing Applications in Business Management*” organized by SRM Institute of Science & Technology, Vadapalani, Chennai from 06.01.2025 to 11.01.2025.

INDUSTRY–INSTITUTE LINKAGE

Initiated and signed **MoUs** with:

- **SCOPIK Edutech Pvt. Ltd.**
- **Skillkora Labs**

Served as **Advisory Board Member** for **Skillkora Labs and Technologies Pvt. Ltd.** from April 2022 to April 2025.

WORKSHOPS / FDPS ATTENDED

- Participated in the National Workshop on “Software Engineering Methodologies and Practices” conducted by Sri Venkateswara Engineering College from 3rd and 4th March 2003.
- Training on Quality Management System and Audit Training during May 2003.
- Attended International Conference INCON-CCC conducted by SSEC between 20th and 22nd August 2004
- Attended One day Workshop on current Trends in Network Security , conducted by Sri Sai Ram Engineering College ,during July 2004
- Attended Faculty Development Program on Total Quality Management conducted by Crescent Engineering College from 29th Nov to 04th Dec 2004.
- Attended “Two-day workshop on .Net & C#” conducted by Computer science & Engg. Department Sri Sai Ram Engineering College in association with Computer Society of India, Chennai Chapter on 17th and 18th December 2004.
- “Two-day workshop on Software Engineering & Object Technology ” conducted by SSEC, Chennai. on 23rd December 2004
- Undergone Rational Rose Training conducted by IBM during the year 3rd and 4th Sep2005.
- National Conference on Distributed Systems & Knowledge Engg. Conducted by IT.& MCA , Sri Sai Ram Engineering College on 16th and 17th September 2005
- STTP on Middle ware Technologies conducted by MCA Dept, Sri Sai Ram Engineering College on 5th and 6th April 2006.
- Faculty Development Programme on Web Technology conducted by CFD, Anna University at SSEC in Association with TCS From May 15th to 20th 2006
- National Conference on Information and Communication Technology. Conducted by Dept. of CSE , Sri Sai Ram Engineering College on 09th and 10th March 2007.
- Attended a workshop on Intellectual Property Rights Organized by SSEC in association with IPR , Chennai on 30th April 2008.
- Attended Staff development programme on Web Services and its application conducted by Department of Computer Science and Engineering during May 2008.
- Attended “MISSION10X” – program on Effective communication and Teaching Enhancement skill”, Nov 2009.
- A national level seminar on “Research methodologies in next generation wireless network using opnet” conducted by department of Information technology, SSEC from 19th to 21st august 2010.

- Attended SDP on “Case Tools” conducted by department of MCA, SSEC from 23rd and 24th of December 2011.
- A national level seminar on “Recent trends in Service Oriented Architecture” conducted by department of Information technology, SSEC from 5th and 6th January 2012.
- Workshop on Journal and Thesis writing , conducted by department of Mechanical Engineering, SSEC on 19.01.12
- Attended seminar on “Data Warehousing and BI & Cloud Computing” held in Sri Sai ram Engineering College on 19th Dec 2012 .
- Attended Seminar on “Reals On networks” held in Sri Sai ram Engineering College on 13th September 2012.
- Paper titled “Content Extraction after Eliminating Noisy Information in Web Pages with Web Crawler” has been accepted for presentation in the International Conference on Cloud Computing & e Governance at Thailand 2012
- Attended workshop on “Science Writing / Journalism” held in Sri Sai Ram Engineering College from 13th Dec to 17th Dec 2012.
- Participated in Faculty Development Program on "Role of Academic Excellence in developing World Class higher learning Institutions and Faculties” held in Sri Sai Ram Engineering College on 12th Dec 2012.
- Attended Seminar on “Soft Computing “ held at Sri Sai ram Engineering College on 05th Jan 2013.
- Attended Seminar on “Soft Computing “ held at Sri Sai ram Engineering College on 07th March 2013.
- Attended a National Conference on Advanced Communication & Computing NCACCT’13 held at Sri Sai ram Engineering College on 18th March 2013.
- Attended a National Conference on Intelligent Computing in Instrumentation and Communication (NCICIC-2013) held at Sri Sai ram Engineering College on 25th & 26th March 2013.
- AICTE Sponsored seminar on Cloud Computing and Mining conducted by department of MCA, SSEC from 26th and 27th September 2013.
- Attended ISTE Sponsored workshop on Network Design – A practical approach conducted by department of Information technology, SSEC on 3rd and 4th October 2013.
- Attended Seminar on Hadoop Distributed File System held at Sri Sai ram Engineering College on 09th October 2013

- Attended FDP on BIG DATA organized by TCS , Chennai on 17th Dec 2013.
- Attended a Faculty development program on “CLOUD COMPUTING” Tata Consutancy services at Sri Sai ram Engineering college, on May 5th ,2014.
- Attended the workshop on “Applications of Artificial Neural Networks in Machine Condition Monitoring” on 2nd September, 2014
- Attended the Seminar on “Recent Trends in E-Learning” by Dr.Daniel from University of Technology , Sydney on 05th November 2014
- Attended Workshop on Cloud computing and Big data on 9th and 10th Dec 2014.
- Attended a one day workshop on” An Awareness program on Matlab” at Sri Sairam Engineering college on 30th December 2014.
- Attended a workshop for “Kani Tamil Peravai” on 30.10.15 at Anna University .
- Attended a Faculty development program on “ Mobile Application Development" at Sri Sairam Engineering college, on 3rd and 4th December,2015
- Attended a Training for coordinators of Kani Tamil Peravai from 25th to 26th February 2016 at Tamil Virtual Academy. Anna University
- Attended FDP on Effective Programming skills organized by CTS, Chennai on 28th may 2016.
- Attended FDP on IoT organized by Dept. of ECE, Sri Sai Ram Engineering College , Chennai from 28.11.16 to 29.01.16.
- Attended a Two day FDP on “Grid and Cloud Computing” at Sri Sairam Engineering college on 8th and 9th August 2016.
- Attended a FDP on “Grid , Cloud Computing and Data Mining” at Sri Sairam Engineering college from 20.6.16 to 24.6.16.
- Attended a National Level Workshop on Hands on Training on Machine Learning Algorithms Using Python Organized by SRM institute of Science & Technology, Dept of Software Engineering, Kattankulathur, kpm22/02/2018 & 23/02/2018
- Attended one day FDP in "**IOT-Business 4.0 & Blockchain Technology**" Conducted by TCS on 27.10.2018
- Attended a 2 days FDP on “**Introduction to Python Programming**” conducted by ICT Academy on 11.3.2019 and 12.3.2019 at Womens Christian College, Chennai.
- Participated in the Online AICTE Recognized Faculty Development Programme on Cloud, Fog and Edge Computing from 14-04-20 to 18-04-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on

Neural Network and CNN from 20-04-20 to 24-04-20 (One Week) Organized by Curriculum Development Centre Department NITTTR, Chandigarh

- Participated in the Online AICTE Recognized Faculty Development Programme on Data Science using R from 11-05-20 to 15-05-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Big Data Analytics from 18-05-20 to 22-05-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Data Analytics using Python from 18-05-20 to 22-05-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Cyber Security from 08/06/2020 to 19/06/2020 (Two Weeks) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Skill Enhancement using Free & Open Software Tools from 15/06/2020 to 19/06/2020 (One Week) Organized by Curriculum Development Centre Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Programming using MATLAB from 08/06/2020 to 12/06/2020 (One Week) Organized by Electrical Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on Artificial Neural Networks and Fuzzy Logic from 22/06/2020 to 26/06/2020 (One Week) Organized by Electrical Engineering Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on Free Tools for Research and Publications from 27/07/2020 to 31/07/2020 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh
- Participated in the ATAL Academy Online FDP on "Artificial Intelligence" from 25/05/20 to 29/05/20 at NITTTR Chandigarh.
- Participated in the ATAL Academy Online FDP on "Blended Learning and Flipped Classroom" from 07/09/20 to 11/09/20 at National Institute of Technical Teachers Training and Research, Chandigarh
- Participated in the ATAL Academy Online FDP on "Artificial Intelligence" from 01/10/20 to 05/10/20 at Indian Institute of Technology Ropar.
- Participated in AICTE Training And Learning (ATAL) Academy Online FDP on "The

Impact of Quantum Computing on Cryptography and Blockchain Technology" from 13/09/2021 to 17/09/2021 at GITAM School of Science.

- Participated in AICTE Training And Learning (ATAL) Academy Online FDP on "Women Entrepreneurship: Opportunities from Ideation to Implementation" from 25/10/2021 to 29/10/2021 at Entrepreneurship Development Institute of India.
- Participated in the Online AICTE Recognized FDP on "Bio-Inspired Optimization Techniques" from 17/01/2022 to 21/01/2022 (one Week) at NITTTR Chandigarh.
- Participated in the Online AICTE Recognized FDP on Internet of Things from 07/02/2022 to 11/02/2022 (one Week) at NITTTR Chandigarh.
- Participated in the Online FDP on Transforming in Medical Research with Next – Gen AI : Machine Learning & Deep Learning in Action, Sponsored by Ministry of Electronics and Information Technology (MeitY), Government of India, organized by E & ICT Academy, NIT Warangal, in association with ANITS Visakhapatnam from 16th June – 26th June, 2025.

GOOGLE SCHOLAR LINK

<https://scholar.google.com/citations?user=Q1bENI0AAAAJ&hl=en>

FUNDED PROJECT DETAILS

Completed Projects:

- *BLUSAV Wearable Security System* – IEDC (₹1,00,000)
- *Weather Forecasting for Smart Agriculture Using Machine Learning* – TNSCST (₹5,000)

Applied Proposals:

- Biogas Plant as an Alternative Source of Energy for Better Life – *UBA* (₹1,00,000)
- Smart Farming with Sensor Networks and Smartphone – *NIDHI-PRAYAS, DST* (₹3,96,000)
- MODROB – *AICTE* (₹19,67,000)
- Research Challenges in Social Network Analysis – *ATAL FDP* (₹1,00,000)
- IoT Based Electric Vehicle Charging Setup with Renewable Penetration Considering Demand Side Management – *Chief Minister's Research Grant* (₹30,00,000)
- Early Stage Cancer Detection (GSR), Automated Text Detection (OCR & QR), Mid-Day Meal Scheme – *TNSCST* (₹30,000)

PAPERS PUBLISHED IN NATIONAL/ INTERNATIONAL JOURNALS

1. Published a paper titled “Content extraction after eliminating noisy information in web pages with web crawler” in the SSEC Tech Journal, ISSN: 0975-2846, Vol.9,pp.100-113.
2. Published a paper titled “Dynamic XML Dissemination supporting twig pattern queries” in the IJAIST- International Journal of Advanced Information Science and Technology ISSN:2319-2682 Vol.17,Issue 17,September 2013
3. Published a paper titled “Improving Service Credibility in Password Authenticated Peer Services” in the IRACST-International Journal of Computer Networks and Wireless Communication(IJCNWC) ISSN:2250-3501 Vol.3 No6,December 2013
4. Published a paper titled “Efficacious Clustering on Weighted Social Networks for Harmonized Probabilistic Graphs” in the international journal of applied engineering and research August 2015.
5. Published a paper titled “Enhanced Clustering of Correlated Probabilistic Graphs” in the International Journal of Scientific Engineering and Research(IJSER)ISSN 2229-5518(2015) **SCOPUS INDEXED JOURNAL.**
6. Published a paper titled “Sub-Topic Modeling-a Hierarchy Model for Topic Correlations” has been published in the, International Journal of Control Theory and Applications IJCTA, 9(28) 2016, pp. 175-179 © International Science Press(ISSN: 09745572) **SCOPUS INDEXED JOURNAL**
7. Published a paper titled “Multi agent based information retrieval system for Multimodal database” has been published in the, International Journal of Printing Packaging and Allied Sciences, Vol.6, No.8, pp.2286 – 2299, ISSN: 2320 –4387, (**ANNEXURE-1**).
8. Published a paper titled “Agent-based handling of parallel jobs in Cloud” in the, Australian Journal of Basic and Applied Sciences, 11(13) October 2017, ISSN:1991-8178 EISSN: 2309-8414,Pages: 117-123 **SCOPUS INDEXED JOURNAL.**
9. Published a paper titled “Multiple Object Identification, Recognition and Tracking System” in the, International Journal of Pure and Applied Mathematics Volume 118 No. 18 2018, 3707-3713 ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version) url: <http://www.ijpam.eu> Special Issue **SCOPUS INDEXED JOURNAL.**
10. Published a paper titled ”Noise elimination from web pages for efficacious information retrieval”,in Cluster Computing the Journal of Networks, Software Tools and Applications ISSN 1386-7857 DOI 10.1007/s10586-018-2366-x Received: 6 February 2018 / Revised: 19 February 2018 / Accepted: 2 March 2018_ Springer Science+

Business Media, LLC, part of Springer Nature 2018. published online:16th March 2018
SCOPUS INDEXED and SCI INDEXED.

11. Published a paper titled, " Agent-based handling of parallel jobs in cloud", in the Australian Journal Of basic and Applied Sciences, ISSN:1991-8178 EISSN: 2309-8414, 1(13) October 2017, Pages: 117-123, Received 10 August 2017,Accepted 1 October 2017,Available online 18 October 2017. Open Access Journal Published BY AENSI Publication© 2017 AENSI Publisher.
12. Published a paper titled,"**Diagnosing Stealth Dyslexia using Artificial Neural Networks**",in the International Journal of Research and Analytical Reviews (IJRAR) Volume 6, Issue 1 ,pp 126-130 (E-ISSN 2348-1269, P- ISSN 2349-5138) IJRAR19SP021 IJRAR February 2019 .**UGC JOURNAL.**
13. Published a paper titled "A Survey on Content Extraction and Noise Elimination from Web Pages" in the SSEC Tech Journal, ISSN:0975-2846,2019.
14. Published a paper titled "Quality Detection System for Bananas" in the International Journal of Research and Analytical Reviews May 2019, Volume 6, Issue 2 ,(E-ISSN 2348-1269, P- ISSN 2349-5138) IJRAR1APP024 (IJRAR) www.ijrar.org. **UGC JOURNAL.**
15. Published a paper titled "Query Expansion For Medical Domain To Augment The Web Search" in the ,International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019. **SCOPUS INDEXED.**
16. Published a paper titled, "Intelligent Ant Colony Based Qos Optimization Routing In Manet" Vol-5 Issue-6 2019 IJARIE-ISSN(O)-2395-4396 ,pp.1587-1595.
17. Published a paper titled, "Smart Water Irrigation System Using IoT", in the Journal of Critical Reviews,Vol 7,Issue 14,ISSN2394-5125,2020. **SCOPUS INDEXED.**
18. Published a paper titled ,"Flood Susceptibility Prediction using LSTM Algorithm", in the Journal of Test Engineering and Management ISSN: 0193-4120Page No. 1 - 08 , May-June2020 ,**SCOPUS INDEXED.**
19. Published a paper titled ,"A Comprehensive Survey on Air Pollution Prediction Techniques",in the Journal Studies in Indian Place Names (**UGC Care Journal**) 40 (3 (s1)), 151-155
20. Published a paper titled WATCH OR NOT: MOVIE RATING PREDICTION USING MATRIX FACTORIZATION in Journal of the Gujarat Research Society 21 (17), 1936-1943,**UGC JOURNAL.**
21. Published a paper titled ,"Real Time Path Planning using Intelligent Transportation

System for Hybrid VANET”ICPECTS 2020 - IEEE 2nd International Conference on Power, Energy, Control and Transmission Systems, Proceedings, 2020, 9337057
SCOPUS INDEXED

22. Published a paper titled ,”**PD Pattern Recognition on Transmission Lines using Tree-Based Models**”ICPECTS 2020 - IEEE 2nd International Conference on Power, Energy, Control and Transmission Systems, Proceedings, 2020, 9336980 **SCOPUS INDEXED.**
23. **“A Hierarchical Machine Learning Frame Work to Classify Breast Tissue for Identification of Cancer “** Lecture Notes in Electrical Engineering, 2022, 808 LNEE, pp. 504–515, **SCOPUS INDEXED**
24. J.Anitha Ruth P.Ramkumar, R.Uma, R.Valarmathi **“Detection of Tomato Plant Disease Based on Convolution Neural Network”** Fourth International Conference on Computing and Communications Technologies (ICCCT 20) .**SCOPUS INDEXED**
25. B Humrutha, K Latha, R Valarmathi, R Uma,”Smart Break-in-Prevention System With Face Recognition”,2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), March 2022(**Scopus-Indexed**)
26. R Uma, A Devi, A Imayavathi, R Valarmathi ,”Meticulous Deep Learning Evolved Drowse Orchestrate Emotionless Community sleep Apnea”, 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), March 2022(**Scopus-Indexed**)
27. S Sangeetha, R Uma, R Valarmathi, ”Dyslexia Biomarker Detection Using Machine Learning”, 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), March 2022(**Scopus-Indexed**)
28. R Valarmathi, R Uma, C Brinda, R Vashika, ”Facial Detection Attendance System using LBPH and KNN”, 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), March 2022(**Scopus-Indexed**)
29. R Uma, P Ramkumar, JA Ruth, R Valarmathi, **”Genome-wide autismprediction”**, AIP Conference Proceedings 2464 (1), 060008,2022(**Yet to be indexed in SCI/Scopus**)
30. D Venkatesh, **R Valarmathi**, R Uma, **”An LSTM-based approach for predicting idiopathic pulmonary fibrosis progression**, AIP Conference Proceedings 2464 (1), 060009, 2022(**Yet to be indexed in SCI/Scopus**)
31. Meenakshi, A., Ruth, J.A., Kanagavalli, V.R., Uma, R. **“Automatic classification of white blood cells using deep features based convolutional neural network”** Multimedia Tools and Applicationsthis link is disabled, 2022, 81(21), pp.

30121–30142(SCI, Scopus-Indexed)

32. Ruth, J.A., Uma, R., Meenakshi, A., Ramkumar, P. “**Meta-Heuristic Based Deep Learning Model for Leaf Diseases Detection**”*Neural Processing Letters* this link is disabled, 2022, 54(6), pp. 5693–5709. (SCI, Scopus-Indexed)
33. Uma, R., Ramkumar, P., Anith Ruth, J., Valarmathi, R., Devi, M.S. ,”**Prediction of Lung Cancer using Data Mining Techniques**”*3rd International Conference On Smart Electronics And Communication, ICOSEC 2022 -Proceedings*, 2022, pp. 975–977(Scopus-Indexed)
34. Subashini, V., Janaki, R., Uma, R., Boojashree, S. “An Efficient Spectrum Sensing Model in Cognitive Radio Network Using Compressive Sensing and Interference Temperature Model”*International Interdisciplinary Humanitarian Conference for Sustainability, IIHC 2022 - Proceedings*, 2022, pp. 722–728. (Scopus-Indexed).
35. Uma, R., Aafreen Sana, H., Jawahar, P., Rishitha, B.V. “Support Vector Machine and Convolutional Neural Network Approach to Customer Review Sentiment Analysis,” *ICCST 2022 – 1st International Conference on Computational Science and Technology*, pp. 239–243. (Scopus Indexed).
36. Radha Devi, G., Uma, R., Vishnuprasath, A., Brindha, D.” **Consistent Application of Capacitive Touch Infrastructure in Wireless Reloadable Sensor Networks**” *AIP Conference Proceedings*, 2023, 2523, 020065(Scopus-Indexed)
37. Uma, R., Harish, P.S., Ragav, N.G., Navin, A. “Third Eye - A Smart Wearable Glass With Deep Learning Technology Powered With Artificial Intelligence for Visually Impaired People” *2023 IEEE International Students' Conference on Electrical, Electronics and Computer Science, SCEECS 2023*, (Scopus-Indexed)
38. Karunya, S., Jalakandeshwaran, M., Babu, T., Uma, R. “AI-Powered Real-Time Speech-to-Speech Translation for Virtual Meetings Using Machine Learning Models,” *ICCEBS 2023 – Intelligent Computing and Control for Engineering and Business Systems*. (Scopus Indexed).
39. Uma, R., Ganesh, K., Sudheer, P., Muthu Kumar, M. “A Deep Learning Based Detection and Classification of Gastrointestinal Diseases,” *ICECIE 2024 – International Conference on Electrical, Control and Instrumentation Engineering*. (Scopus Indexed).
40. Ruth, J.A., Mahesh, V.G.V., Uma, R. “Implementation of Ensemble Predictive Models for Parkinson’s Disease Detection,” *Lecture Notes in Networks and Systems (LNNS)*, Vol. 1074, pp. 593–606, 2024. (Scopus Indexed).
41. Uma, R., Jayabalan, A., Padmakala, S. “Comprehensive Heart Attack Prediction

Model Using Stacked Ensembles and Clinical Feature Engineering,” ICMSCI 2025 – International Conference on Multi Agent Systems for Collaborative Intelligence, pp. 1943–1949. (Scopus Indexed).

PAPERS PRESENTED IN THE CONFERENCES

- Presented a paper on “Impact of Quality Management Models in Technical Education” at QQUEST-2003 C.
- Presented a Paper titled “Content Extraction after Eliminating Noisy Information in Web Pages with Web Crawler “in National Conference on Data mining and Distributed Applications conducted by Sathyabama University held on September 2011.
- Presented a Paper titled “Mining and Prediction in Mobile Commerce using Android” in the National Conference on Emerging Issues in Computer Applications for Modernization in IT, 16th Feb 2013 organized by KSR College of Engineering.
- Presented a Paper titled “Dynamic XML Dissemination supporting twig pattern queries” in the National Conference on NCCSSP-2013, National Conference on Communication Systems and Signal Processing, 19th October 2013
- Presented a Paper titled “Mining and Prediction in Mobile Commerce using Android” in the International Conference on Advanced Computing, Machines and Embedded Technology (ICACT-2013)
- Presented a Paper titled “Reliable Symmetric Peer Services for only Password Authentication” in the National Conference of NCRICSE 2014, March 10, 2014 RMK Engineering College.
- Presented a Paper titled “Towards Reliable Service For Password Substantiation Peer Services ” in the International Conference on Electrical Communication and Computing ICECC-2014 13th & 14th March 2014.
- Presented a Paper titled “Efficacious Clustering on Weighted Social Networks for Harmonized Probabilistic Graphs” in the National Conference on Emerging and Innovative Trends in Computer Science NCEITC’15 at S.Veerassamy Chettiar College of Engineering and Technology on 18th March 2015.
- Presented a Paper titled “A Survey on Object Encompassing with Swarm Robots” in the National Conference on Recent Trends in Information Technology (NCRITIT’15) at Adhiparasakthi Engineering College on 28th March 2015.
- Presented a Paper titled “Brain Tumor Detection Using Convolution Neural Network and Support Vector Machine” in the International conference on Computational Science and

Technology, organized by dept of CSE, Sri Sai Ram Engineering College, 9th and 10th March 2017.

- Presented a Paper titled “Fusing and Mining Opinions To Promote Healthcare” in the International conference of International conference on Electrical, Electronics & Computer Engineering, held at Vivekanandha College of Engineering for Women, 22nd & 23rd March 2016, pp. 500
- Presented a Paper titled “Segmentation and Classifications Of MRI Brain Images” in the National conference on Recent Issues in Network Galaxy-RING, organized by dept of CSE, R.M.D. Engineering college, 4th April 2017.
- Presented a Paper titled “Graph Inference based Information Retrieval for Sports Domain” in the 1st National conference on Recent Advances in materials Science and Nanotechnology (RAMN-2017) at Academy of Maritime Education and Training (AMET) on 26- 27th May 2017 and has been published in the proceedings ISBN:978-81-89843-85-4.PP-14.
- Presented a Paper titled “Mobility Platform for Physically Handicapped and Senior Citizens using Wireless Sensor Networks” in the International conference on Advancements in Science, Engineering and Technology (ICASET '18), held at M.P.Nachimuthu M.Jaganathan Engineering College on 28th March 2018.
- Presented a Paper titled “Mobility Platform for Physically Handicapped using Wireless Sensor Network” in the International conference on Advanced Information and Communication Technology (ICAIC-'18), held at KARPAGAM College of Engineering during 8th and 9th March 2018.
- Presented a Paper titled, ”Diagnosing Stealth Dyslexia Using Artificial Neural Networks”, Research Conference on Data & Decision Science (RCDDS'18) – Organized by SRM Institute of Science and Technology Chennai and received the best paper award on 4th and 5th May 2018.
- Presented a Paper titled, ” Energy Theft Detection in Multi Tenant Data Centers and Distribution line using Smart Grid”, National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE, Sri Sai Ram Engineering College Chennai on 27th March 2018.
- Presented a Paper titled, ” Evaluation of k-means and k*-means Algorithm For Image Segmentation Prior to Classification “National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE, Sri Sai Ram Engineering College Chennai on 27th March 2018.
- Presented a Paper titled, ” Logograph To Gesture Conversion For Speech And Hearing Impairment” National Conference on Smart Innovations in Communications and

Computing (NCSICC'18) – Organized by Dept of CSE, Sri SaiRam Engineering College Chennai on 27th March 2018.

- Presented a Paper titled, "Peltier Based Energy Harvesting System" National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE, Sri SaiRam Engineering College Chennai on 27th March 2018.
- Presented a Paper titled, "Mobility platform for physically Challenged and old people using wireless Sensor network", National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Organized by Dept of CSE, Sri SaiRam Engineering College Chennai on 27th March 2018.
- Presented a Paper titled, "**Mobility Platform For Physically Handicapped And Senior Citizens Using Wireless Sensor Network**" "International Conference On Advancements In Science, Engineering Technology- 2018(ICASET'18), Mpmnj Engineering College Chennimalai, On 28th March 2018
- Presented a Paper titled, "**Flood Susceptibility Prediction using LSTM Algorithm**" " in the 3rd International Conference on Advances in Computing Technology - Raja Rajeswari Engineering College, Bangalore 18th June 2020 and 19th June 2020
- Presented a Paper titled, "**Smart Water Irrigation System Using IoT**" " in the 3rd International Conference on Advances in Computing Technology - Raja Rajeswari Engineering College, Bangalore 18th June 2020 and 19th June 2020
- Presented Paper on "**PD Pattern Recognition on Transmission Lines Using Tree-Based Models**" in the IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'20) Organized by Sri Sairam Engineering college between December 10 and December 11, 2020.
- Presented Paper on "**Real Time Path Planning Using Intelligent Transportation System for Hybrid VANET**" in the IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'20) Organized by Sri Sairam Engineering college between December 10 and December 11, 2020.
- Presented a Paper on "**Flood Susceptibility Prediction using LSTM Algorithm**", International Conference on advances in Computing Technologies (ICACT-2020) held at Raja Rajeswari Engineering College, Bangalore on 18th and 19th June 2020.
- Presented a Paper on "**Detection of Tomato Plant disease based on Convolution Neural Network**" in the 2021 fourth International Conference on Computing and Communication Technologies (ICCT'21) held on 16th and 17th December 2021
- Presented Paper on "**Detection of Tomato Plant Disease Based on Convolution**

Neural Network” in the Fourth International Conference on Computing and Communications Technologies (ICCCT 20),2021.

NPTEL COURSES COMPLETED

- 1.Learning Analytics Tools (Jul-Oct 2025)
- 2.Business Intelligence & Analytics (Jan-Apr 2025)
- 3.Deep Learning (Jan-Apr 2024)
- 4.Python for Data Science (Jan-Feb 2024)
- 5.Introduction To Machine Learning - IITKGP (Jul-Sep 2023)
- 6. Introduction to Human Computer Interaction(Feb-Mar 2018)

NITTT

- Completed Module 7:Instructional Planning and Delivery of NITTT.
- Completed Online Orientation Training Program for Mentors organized from 5th to 9th July 2021 under National Initiative for Technical Teachers Training.
- Completed

Dr. R.Uma