



Dr. K.KAVITHA, Ph.D

Assistant Professor

Department of Computer Science Mother Teresa Women's University

Kodaikanal- 624 101, Tamilnadu

Email: kavitha.urc@gmail.com

Mobile: 9443133000

ACADEMIC PROFILE

- Ph.D – Computer Science from Madurai Kamaraj University, Madurai (Nov 2014)
- M.Phil – Computer Science from Bharathidasan University, Trichy (March 2009)
- MCA – Madurai Kamaraj University, Madurai (April 2002)
- B.Sc - Chemistry , Alagappa Govt. Arts College, Karaikudi (April 1999)

TECHNOLOGY SUMMARY/COMPUTER SKILLS

- **Programming / Languages:** VB .Net, C, C++, C#, Visual Basic, HTML, PHP, Java
- **Databases Management:** Oracle, SQL Server, MS Access
- **Design Tools:** Photoshop, Flash, Corel Draw
- **Operating System:** Windows, Unix, Linux

EXPERIENCE

Teaching Experience : 18 Years

Research Experience : 9 Years

CAREER HISTORY

- ✚ Assistant Professor, Department of Computer Science, Mother Teresa Women's University, Kodaikanal (from 30.3.2015 till date)
- ✚ Assistant Professor, Department of Computer Science, Dr.Umayal Ramanathan College for Women, Karaikudi (from June 2007 to March 2015)
- ✚ Guest Lecturer, Department of Computer Science, Alagappa Govt. Arts College,

Karaikudi (from June 2002 to May 2007)

ADDITIONAL RESPONSIBILITIES

- Member – Placement Committee, Mother Teresa Women’s University
- Member- Website Updation Committee, Mother Teresa Women’s University
- Member – Distance Education Inspection Committee, Mother Teresa Women’s University

RESEARCH INTEREST

Data Mining, Data Analytics, Cloud Computing, Internet of Things

RESEARCH SUPERVISION

Program of Study	Completed	Ongoing
Ph.D	5	4
M.Phil	11	1

PUBLICATIONS

International		National		Others
Journal	Conference	Journal	Conference	Books/Edited
56	11	-	30	2

MEMBERSHIPS

Professional

- Life Member of International Association of Engineers (IAENG)

Academic

1. Board of Studies Member, Department of Computer Science, Madurai Kamaraj University from June 2017 to 2020.
2. Board of Studies Member, Department of Computer Science, Mother Teresa Women’s University from 2017 to 2020.

SEMINAR/WORKSHOPS/CONFERENCES

1. Organised in Leading Role : 12
2. Resource Person/Invited Talk in various capacities : 15

PROJECT SANCTIONED

1. ICMR sponsored Rs. 40,000 – National Conference on “Innovative Smart Technologies for Public HealthCare” – 2018
2. ICSSR sponsored Rs. 1,00,000 – National Conference on Tribal Women Empowerment via Emerging Technologies: Issues and Challenges” – 2017-2028.

3. NCW sponsored Rs. 1,32,250 – Three Days Workshop on “Empowering Underprivileged Rural Women as Entrepreneur via Skill Training Programmes in and around Madurai District” – 2019-2020.
4. ICSSR sponsored Rs. 30,000 – National Webinar on “Awareness on Cyber Security to Prevent Crime among Adolescent Girls” – 2021.
5. Co-Investigator, “Steps to stop Female Infanticide in Madurai and Theni Districts Tamilnadu”, funded by Social Welfare Department Tamilnadu – 2021 to 2022, 1.5 Lakhs.
6. Project Director, “A journey of transformation 360 degree assessment of sukanya samridhi yojana and beti bachao beti bachao initiatives in five districts of tamilnadu” - ICSSR, Sep 2023 to March 2024, 10 lakhs.

RECENT PUBLICATIONS

1. **“Mining Actionable Patterns using Combined Association Rules”**, International Journal of Current Research, Vol-4, Issue-03, Page No – 117-120, ISSN: 0975-833X, March 2012.
2. **“A Knowledge Discovery Approach in Shopping Complex Database(ASCD)”**, International Journal of Computer and Organization on Trends, Vol-2, Issue-3, Page No – 69-72, ISSN: 2249-2593, 2012.
3. **“IP-FPM: An Efficient Algorithm for Intensified Priority based Frequent Pattern Mining”**, European Journal of Scientific Research, Vol-95, No-2, Page No – 206-217, ISSN: 1450-216X/1450-202X, January 2012.
4. **“Efficient Patterns using Hidden Web Trajectory Concept”**, International Journal of P2P Network Trends and Technology(IJPTT), Vol-3, Issue-1, Page No – 7-11, ISSN: 2249-2615, January to February 2012.
5. **“An Adequate Approach for Actionable Pattern using Combined and Composite Association Rule Mining”**, UNIASCIT-IEEE paper, Vol-3, Issue-2, Page No – 387-393, ISSN: 2250-0987, 2013.
6. **“Comparing Various Approaches of Frequent Pattern Mining with Combined Association Rule”**, European Journal of Scientific Research, Vol-106, No-4, Page No – 492-502, ISSN: 1450-216X/1450-202X, July 2013.
7. **“Efficient Transaction Reduction Actionable Pattern Mining for High Voluminous Datasets based on Bitmap and Class Labels”**, International Journal on Computer Science and Engineering(IJCSE), Vol-5, No-7, Page No – 664-671, ISSN:

0975-3397, July 2103.

8. **“Methodology to reduce Transaction in Candidate Set Generation through Apriori Algorithm”**, International Journal of Applied Engineering Research(IJAER),Vol-10, No-55, Page No – 2707-2710, ISSN: 0973-4562, January 2015.
9. **“Academic Performance Appraisal for Teachers using Association Rule Mining Techniques”**, International Journal of Computer Science and Network, Vol-4, Issue-3, Page No – 543-545, ISSN: 2277-5420, June 2015. (IF:0.417)
10. **“Mobile Banking Supervising System-Issues, Challenges & Suggestions to Improve Mobile Banking Services”**, ACSIJ Advances in Computer Science: an International Journal, Vol-4, Issue-4, No-16, Page No – 65-67, ISSN: 2322-5157, July 2015.
11. **“Methodology for Hiding Sensitive Information and Pruning Infrequent Itemsets for Association Rule Mining”**, International Journal of Computer Applications, Vol-131, No-6, Page No – 42-45, ISSN: 0975-8887, December 2015.
12. **“Predicting Risk for Evaluating Eligible Students using Multi-Dimensional Dataset”**, International Journal of Engineering and Computer Science, Vol-5, Issue-1, Page No – 15623-15626, ISSN: 2319-7242, January 2016.
13. **“Ranking Interest Rules for Recognizing Best Teacher using Multidimensional Datacube”**, International Journal of Computer Science and Mobile Applications, Vol-4, Issue-2, Page No – 1-8, ISSN: 2321-8363, February 2016.
14. **“Overview of Classification and Risk Evaluation in Multi-Dimensional Datasets”**, International Journal of Engineering and Computer Science, Vol-5, Issue-3, Page No – 15976-15979, ISSN: 2319-7242, March 2016.
15. **“Novel Stratification of Uterus Region for Prior Stage Treatment based on Severity Level”**, International Journal of Modern Computer Science, Vol-4, Issue-2, Page No – 75-78, ISSN: 2320-7868, April 2016.
16. **“Anti-Collusion Data Sharing Policy for Regularly Varying Groups using Cloud Computing”**, International Journal of Advanced Research in Computer Engineering and Technology, Vol-5, Issue-4, Page No -1235-1239, ISSN: 2278-1323, April 2016.
17. **“A Spatial Approximate String Queries to Solve Issues in Carpool Services using MHR-Tree in Cloud”**, International Journal of Advanced Research in Computer Engineering and Technology, Vol-5, Issue-4, Page No -1194-1197, ISSN: 2278-1323, April 2016.

18. **“Improving Health Care in Social Media using Data Mining”**, International Journal of Advanced Research in Computer Engineering and Technology, Vol-5, Issue-4, Page No -1244-1247, ISSN: 2278-1323, April 2016.
19. **“Enhancement of Map Reduce Framework based on K-Medoid”**, International Journal of Advanced Research in Computer Engineering and Technology, Vol-5, Issue-4, Page No -1198-1201, ISSN: 2278-1323, April 2016.
20. **“Precising the Characteristics of Hybrid Trust Aware Routing Framework”**, International Journal of Advanced Research in Computer Engineering and Technology, Vol-5, Issue-4, Page No -1174-1176, ISSN: 2278-1323, April 2016.
21. **“Improvising Health Care in Social Media using Intellectual Network”**, International Journal of Modern Computer Science, Vol-4, Issue-2, Page No – 111-113, ISSN: 2320-7868, April 2016.
22. **“Avoiding Traffic Congestion based on MHR Tree in Carpool Services”**, International Journal on Recent and Innovation Trends in Computing and Communication, Vol-4, Issue-4, Page No – 627-630, ISSN: 2321-8169, April 2016.
23. **“Precising the Characteristics of IP-FPM Algorithm”**, International Journal of Computer Science Trends and Technology(IJCST), Vol-4, Issue-2, Page No – 252-258, ISSN: 2347-8578, March-April 2016.
24. **“Cluster based Resource Allocation using K-Medoid Clustering Algorithm”**, SSRG International Journal of Computer Science and Engineering, Vol-3, Issue-5, Page No – 10-13, ISSN: 2348-8387, May 2016.
25. **“Secure Routing in Wireless Sensor Network using HTARF”**, SSRG International Journal of Computer Science and Engineering, Vol-3, Issue-5, Page No – 27-30, ISSN: 2348-8387, May 2016.
26. **“Sensitive Rule Hiding and Infrequent Filtration through Binary Search Method”**, International Journal of Computational Intelligence Research, Vol-13, No-5, Page No – 833-840, ISSN: 0973-1873, 2017.
27. **“Fidoop-Parallel Mining of Frequent Itemsets using Map Reduce”**, International Journal of Advanced Research in Computer Science, Vol-8, No-7, Page No – 714-719, ISSN: 0976-5697, August 2017.
28. **“Performance Analysis of Modified Blowfish Algorithm towards Cloud Security”**, International Journal of Computer Science and Mobile Applications, Vol-5, Issue-10, Page No – 219-229, ISSN: 2321-8363, October 2017.(IF: 5.515)
29. **“Implementing Joint Scheduling Approach in Cloud Computing for Energy**

Optimization", International Journal of Pure and Applied Mathematics, Volume 118, No.9, Page No – 703-709, ISSN: 1314 3395, 2018.

30. **"Changing Dimensions of Tribal Markets through Social Media Platform with Reference to Kodaikanal"**, International Journal of Scientific Research in Computer Science Applications and Management Studies, Vol-7, Issue-5, Page No – 1-5, ISSN: 2319-1953, September 2018.
31. **"Task Recommendation Methods in Crowd Sourcing Systems: A Review"**, Review of Research, Vol-8, Issue-5, Page No – 1-3, ISSN: 2249-894X, February 2019.(IF: 5.7631_UGC Approved Journal No - 48514).
32. **"A Survey on Bigdata Mining in Healthcare System"**, Journal of Emerging Technologies and Innovative Research, Vol-6, Issue-4, Page No – 68-74, ISSN: 2349-5162, April 2019.
33. **"Different Methodology in Bigdata and Cloud Computing Resource Management Frameworks"**, Journal of Emerging Technologies and Innovative Research, Vol-6, Issue-4, Page No – 82-89, ISSN: 2349-5162, April 2019.
34. **"A Detailed Critical Inspection on Real Time Crowd Sourcing Systems"**, Journal of Information and Computational Science, Vol-9, Issue-8, Page No – 680-689, ISSN: 1548-7741, August 2019.
35. **"Classifying the Category of Workers using Crowd Sourced Job Seekers Data"**, International Journal of Innovative Technology and Exploring Engineering, Vol-9, Issue-1, Page No – 2389-2394, ISSN: 2278-3075, November 2019.
36. **"Disease Inference from Health-Related Questions using Sparse Neural Network and LSTM"**, International Journal of Innovative Technology and Exploring Engineering, Vol-9, Issue-4, Page No – 65-71, ISSN: 2278-3075, February 2020.
37. **"Mathematical Model-Based Speech Signals Processing Effects on Human Stress"**, International Journal of Emerging Trends in Engineering Research, Vol-8, No-2, Page No – 361-364, ISSN: 2347-3983, February 2020.
38. **"An Efficient Node Priority and Threshold-Based Partitioning Algorithm for Graph Processing"**, Lecture Notes in Networks and Systems – Intelligent Computing and Innovation on Data Science, Vol-118, Page No – 783-792, ISSN: 2367-3370/2367-3389, February 2020.
39. **"Performance Evaluation of Supervised and Unsupervised Machine Learning Algorithms by Predicting Cardiovascular heart Disease"**, International Journal on Emerging Technologies, Vol-11, Issue-3, Page No – 377-382, ISSN: 0975-8364/2249-

3255, April 2020.

40. **“Novel Region Specific Decision Support System for Crop Selection and Cultivation”**, ICTACT Journal on Soft Computing, Vol-10, Issue-4, Page No – 2134-2138, ISSN: 2229-6956, July 2020.
41. **“Random Task Unit and Contribution Density(RTU_CD) based Technique for Crowd Sourcing Network”**, IEEE Xplore Part Number – CFP20J32, Page No – 302-308, ISBN: 978-1-7281-5518-0, August 2020.
42. **“Task Unit Bid-Spatial Coverage and Post Input Density(TUBSC_PID) based Crowd Sourcing Network”**, Multimedia Tools and Applications, Page No -1-16, ISSN: 1380-7501, October 2020.
43. **“A Study on Deep Learning in Health Care System”**, Journal of the Maharaja Sayajirao University of Baroda, Vol-54, No-2, Page No – 12-15, ISSN: 0025-0422, 2020.
44. **“A Study on Large Scale Graph Processing Framework Performance for Cloud Operations in Different Nodes”**, Journal of the Maharaja Sayajirao University of Baroda, Vol-54, No-2, Page No – 146-149, ISSN: 0025-0422, 2020.
45. **“Assessing Teacher’s Performance Evaluation and Prediction Model using Cloud Computing Over Multi-dimensional Dataset”**, Wireless Personal Communication – Springer, Vol-119, Page No – 3207-3221, ISSN: 1572-834X/0929-6212, April 2021.
46. **“Automated Disease Inference for Community Health Care using Graph Induced Neural Network”**, Turkish Journal of Computer and Mathematics Education, Vol-12, No-10, Page No – 4935-4947, ISSN: 1309-4653, April 2021.
47. **“Context Mining for Deep Learning Over Community Health Data for Disease Inference”**, Advanced in Intelligent Systems and Computing - Springer, Vol-1292, Page No – 353-362, ISSN: 2194-5365, May 2021.
48. **“Early Diagnosis of Chronic Kidney Disease using Machine Learning Algorithms with Least Parameters by RFE and Feature Importance Techniques”**, Advances in Intelligent Systems and Computing – Springer Nature, Vol-1292, Page No – 167-177, ISSN: 2194-5365, May 2021.
49. **“Automatic IP Configuration and Duplicate Node Detection using Improved Extreme Learning Machine based Hunger Games Search”**, Design Engineering – Scopus, Vol-2021, Issue-7, Page No – 13345-13358, ISSN: 0011-9342, 2021.
50. **“An IP Address Auto-Reconfiguration and Optimal Duplicate IP Address Detection Scheme using AIPAC based Hunger Game-Search Algorithm for**

ADHOC Networks", Design Engineering – Scopus, Vol-2021, Issue-7, Page No – 12966-12983, ISSN: 0011-9342, 2021.

51. **"Disease Inference using LSTM and Sparse Neural Network-Health Data"**, 2021 2nd International Conference on Smart Electronics and Communication (ICOSEC)-IEEE, Page No – 1645-1648, ISBN:978-1-6654-3368-6, November 2021.
52. **"Multi-Level Thresholding Partitioning Algorithm for Graph Processing in Cloud Computing"**, Lecture Notes on Data Engineering and Communications Technologies – Mobile Computing and Sustainable Informatics-Springer, Vol-126, Page No – 819-831, ISSN 2367-4520, July 2022.
53. **"An Automatic IP Autoconfiguration Scheme using Harmony Search Algorithm Optimized Hybrid Extreme Learning Machine Model"**, SSRG International Journal Electrical and Electronic Engineering, Vol-9, Issue-9, Page No – 12-22, ISSN: 2348-8379, September 2022.
54. **"Network Lifetime Enhancement by Employing Clustering and Sleep Cycle Scheduling Techniques with Ensemble SVM Learner and Crystal Algorithm"**, SSRG International Journal Electrical and Electronic Engineering, Vol-9, Issue-12, Page No – 30-38, ISSN: 2348-8379, December 2022.
55. **"A Novel Fuzzy Enhanced Black Widow Spider Optimization for Energy Efficient Cluster Communication by Optimal Cluster Head Selection in WSN"**, SSRG International Journal Electrical and Electronic Engineering, Vol-9, Issue-12, Page No – 49-58, ISSN: 2348-8379, December 2022.
56. **"A Brief Survey On Applying New Innovative Techniques To Identifying Crop Yield Improvement Using Insect Images"**, Journal of Data Acquisition and Processing, Vol. 38 (2) 2023, Page No – 4104-4111, ISSN: 1004-9037, April 2023

CONFERENCE PROCEEDINGS

1. **"An Innovative Approach for Extracting Frequent Itemset & Reducing Number of Scanning from Massive Dataset"**, International Conference on Computational Intelligence and Big Data Analytics organized by Vivekananda Institute of Information and Management Studies, Tiruchengode on 6th & 7th March 2015, ISBN: 978-93-80686-10-3, Page No – 48-51.
2. **"Performance Evaluation of Brain Tumour Diagnosis Techniques in MRI Images"**, International Conference on Emerging Trends in Technology, Science and

Upcoming Research in Computer Science DAVIM, Faridabad - International Journal of Advanced Technology on 25th April 2015, ISBN: 978-81-931039-3-7, Page No – 1636-1642.

3. **“User Profiling using Recommendation Systems”**, International Conference on Emerging Trends in Technology, Science and Upcoming Research in Computer Science DAVIM, Faridabad - International Journal of Advanced Technology in Engineering and Science on 25th April 2015, ISSN: 2348-7550, Page No – 366-369.
4. **“Aspects based Product Evaluation using Sentiment Analysis”**, International Conference on Emerging Trends in Technology, Science and Upcoming Research in Computer Science DAVIM, Faridabad - International Journal of Advanced Technology in Engineering and Science on 25th April 2015, ISSN: 2348-7550, Page No – 358-364.
5. **“Comparative Study of various Enhanced Selection Sort Algorithm”**, National Seminar on Recent Trends for Privacy Preserving Techniques in Data Mining organized by St. Joseph College, Irinjalakuda on 7th July 2015 - International Journal of Engineering Research & Technology (IJERT), Page No – 16-18.
6. **“Emphasizing the Online Payment Services & Recommendation a New Framework for Improvising Electronic Payment System”**, Two Days National Seminar on Resurgence of C Language organized by Carmel College, Mala, Kerala on 31st July & 1st August 2015 - International Journal of Engineering Research & Technology (IJERT), Page No – 70-71.
7. **“Systematic Students Performance Evaluation using Data Mining Techniques”**, National Conference on Innovative Technologies & Advanced Computing- NCITAC’15 organised by Fatima College, Madurai on 11th September 2015, ISBN: 978-81-93-02-349-5, Page No. 62-67.
8. **“Recommended Framework for Identifying the Best Project Proposal using Risk Evaluation and Prediction”**, National Conference on Recent Trends in Computer Technology (NCRTCT-2015) organized by Kodaikanal Christian College, Kodaikanal on 16th September 2015 - International Journal of Research in Science Engineering and Technology, ISSN: 2394-7396, Page No: 1-4.
9. **“Performance Appraisal For Renewable Power Consumption in Cloud Computing Using Smart Grid”**, National Conference on Recent Trends in Computer Technology (NCRTCT-2015) organized by Kodaikanal Christian College, Kodaikanal on 16th September 2015 - International Journal of Research in Science

Engineering and Technology, ISSN: 2394-7396, Page No: 1-5.

10. **“Energy Based Efficient Resource using Green Cloud Computing”**, International Journal of Computer Science & Engineering Technology(IJCSET) - 16th September 2015, Vol-1, Issue-1, Page No – 62-65.
11. **“A Load Balancing Mock up based on Cloud Segregation for the Public Cloud”**, International Journal of Computer Science & Engineering Technology(IJCSET) - 16th September 2015, Vol-1, Issue-1, Page No – 1-3.
12. **“Anticipation of Best Project Proposals based on Risk Assessment using Clustering Technique”**, International Conference on Information Technology organized by Thiruthangal Nadar College, Chennai on 25th September 2015, Journal of Network Communications and Emerging Technologies (JNCET), ISSN: 2395-5317, Page No. 11-13.
13. **“Promotion and Foremost Issues, Challenges in E-Governance”**, Two Day National Seminar on Vision India 2020: Dr. A.P.J. Abdul Kalam’s Dreams through Women organized by Bharathidasan University, Trichy on 15th & 16th October 2015, ISBN: 978-93-83213-09-2, Page No – 226-228.
14. **“Security Threats and Privacy Issues in Traditional and Cloud Computing”**, Fourth International Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems (ICDASDC - 2015) organized by K.L.N College of Information Technology on 27th & 28th November 2015, ISBN: 978-1-944171-34-6, Page No – 1-3.
15. **“Student’s Appraisal towards Programming Skills in Higher Educational Institutions using Data Mining Techniques”**, National Conference on New Horizons in Computational Intelligence and Information Systems [NCNHCIIS-2015] organized by Department of Computer Science, Gandhigram Rural Institute, Dindigul on 17th and 18th December 2015, Page No. 250-253, ISBN: 978-93-85777-02-8.
16. **“Precising Women using Digital Security Techniques”**, National Conference on Innovative Trends in Information Technology organized by Sri Vasavi College, Erode on 5th March 2016, ISBN: 978-93-85517-12-9, Page No. 17-21.
17. **“Issues and Challenges in Customer and Consumer Relationship Management towards E-Business Strategies”**, National Seminar on Recent Trends in Computer Applications, organized by Sourashtra College, Madurai on 10th March 2016, ISBN: 819294585-5, Page No. 27-34.

18. **“Issues in Girl’s Education and Steps to improve their Education through ICT”**, National Seminar on Challenges on Girl Child’s Health, Education and Protection-Making the Right a Reality organized by Annamalai University, Chidambaram on 17th & 18th March 2016, Page No. 61-64.
19. **“ICT Responsibilities towards Rural Health Care systems”**, National Conference on Role of Information and Communication Technology on the Growth of Service Industries, organized by Sri Kaliswari College, sivakasi on 20th & 21st March 2016 ISBN:978-93- 5258-485-7, Page No.10-11.
20. **“Securing Anti-Collusion Data Sharing Pattern For Dynamic Groups in the Cloud Environment”**, National Conference on Recent Advances in Computer Technologies (NCRACKT) organized by Adhiparasakthi Engineering College, Melmaruvathur on 28th April 2016, ISBN: 978-93-81208-70-2, Page No – 259-263.
21. **“Map Reduce For Big Data Processing based on Traffic-Aware Partition and Aggregation Using K-Medoid Clustering”**, National Conference on Recent Advances in Computer Technologies (NCRACKT) organized by Adhiparasakthi Engineering College, Melmaruvathur on 28th April 2016, ISBN: 978-93-81208-70-2, Page No – 236-240.
22. **“An Intellectual Network Model For Improving Health Care in Social Media”**, National Conference on Recent Advances in Computer Technologies (NCRACKT) organized by Adhiparasakthi Engineering College, Melmaruvathur on 28th April 2016, ISBN: 978-93-81208-70-2, Page No – 232-235.
23. **“A MHR- Tree Based Approach To Solve Car pool Service Problems in Cloud”**, National Conference on Recent Advances in Computer Technologies (NCRACKT) organized by Adhiparasakthi Engineering College, Melmaruvathur on 28th April 2016, ISBN: 978-93-81208-70-2, Page No – 252-254.
24. **“Study on Empowerment of Disabled Women through Government Welfare schemes and Empowering Strategies through ICT”**, National Conference on Gender parity and Women Employability in Present Scenario, organized by Department of Women’s Studies Mother Teresa Women’s University on 3rd February 2017, ISBN: 978-81-86520-29-5, Page No – 74-78.
25. **“Lessen Database Scanning towards Hiding Sensitive Data based on Binary Search Approach”**, International Conference on Advancements in Computer Resources organized by Alagappa University - International Journal of Computer Science on 15th February 2017, ISSN: 2348- 6600, Page No – 1488-1501.

26. **“Review on Secure Mobile Cloud Storage through Encryption Algorithm”**, International Conference on Digital India- the Unfolding opportunities & Challenges, organized by Department of computer Applications, Vivekanandha Institute of Information and Management Studies on 2nd March 2017, ISBN:938597788-1, Page No – 30-34.
27. **“Dynamic and Secure Deduplication towards Encrypted Data in Big Data Cloud Service”**, National Conference on Emerging Trends in Computing organized by Department of Computer science, Alagappa University - International Journal of Engineering and Technology on 13th March 2017, Vol-9, Issue-5, ISSN(P)-2319-8613, ISSN(Online)-0975-4024, Page No – 3602-3604.
28. **“Improvising Women Safety through Smart Technologies”**, National Conference on Women against Violence organized by Department of Women’s studies, Mother Teresa Women’s University on 7th April 2017, ISSN: 2455 7285, Page No. 71-73.
29. **“Rescue Technique Awareness for Adults in Post Crash care Accident using Mobile Application”** National Conference on Public Health Informatics- The Future Perspective” organized by Department of Computer Applications, Vivekanadha Institute of Information and Management Studies on 31st August 2017, ISBN:978-9387102-13-2, Page No. 127-131.
30. **“Enhancing Cloud Security through Modified Blow Fish Algorithm”**, International Conference on Global Talent Management in the Digital Era, organized by Department of Computer Applications, Fatima College, Madurai on 13th September 2017, ISBN:978-93-86537-95-9, Page No – 256-262.

REFRESHER COURSE / FDP

1. UGC Sponsored **Orientation Programme** organized by UGC Human Resource Development Centre, Madurai Kamaraj University, Madurai from 26.05.2016 to 22.06.2016.
2. UGC Sponsored **Refresher Course** organized by UGC Human Resource Development Centre, Bharathiar University, Coimbatore from 13.02.2019 to 05.03.2019.
3. Five Days Online **Faculty Development Programme** on “Data Science using Python”, organized by Department of Computer Science and Engineering, Kongu Engineering College, Erode from 20.05.2020 to 24.05.2020.

4. Five Days International **Professional Development Programme** on “Scholarly Publishing: Swirls Unfurled” organized by The Delany Library, Patrician College of Arts & Science, Chennai from 14.06.2021 to 18.06.2021.
5. Inter-Disciplinary Online Two - Week **Refresher Course/Faculty Development Programme** on “Managing Online Classes & Co- creating MOOCS 8.0” organized by Teaching Learning Centre, Ramanujan College University of Delhi from 04.09.2021 to 18.09.2021.
6. UGC Sponsored **Refresher Course** organized by UGC Human Resource Development Centre, Bharathidasan University, Thiruchirappalli from 22.09.2021 to 05.10.2021.
7. One Week **National Level FDP** On Administrative Capacity Building organized by Department of Electronics and Communication Engineering, School of Electrical and Electronics, Sathyabama Institute of Science and Technology , Chennai from 25.10.2021 to 31.10.2021.
8. UGC Sponsored **Refresher Course** organized by UGC Human Resource Development Centre, Madurai Kamaraj University, Madurai from 02.11.2022 to 15.11.2022.

BOOKS / BOOK CHAPTERS

1. Web Design Technology, RIP Research India Publications, Delhi, ISBN: 978-93-84443-85-6, Page No – 1-104.
2. SQL Commands & PL/SQL: A Practice, RIP Research India Publications, Delhi, ISBN: 978-93-84443-74-0, Page No – 1-89.

SEMINAR / CONFERENCE / WORKSHOP ORGANIZED

S.No	Date	Topic	Venue
1.	30.10.2023 to 01.11.2023	Data Analytics and Visualization	Mother Teresa Women's University, Madurai
2.	24.2.2023 & 25.2.2023	Mathematical Modeling & Computational Science	Mother Teresa Women's University, Madurai
3.	15.7.2022	Data Science in Current Scenario	Mother Teresa Women's University, Madurai
4.	11.7.2022	Intelligent Internet of Things	Mother Teresa Women's

	& 12.7.2022		University, Kodaikanal
5.	7.7.2022 & 8.7.2022	Research Conclave	Mother Teresa Women's University, Kodaikanal
6.	6.5.2022 to 12.5.2022	Internet of Things & its Applications	Mother Teresa Women's University, Madurai
7.	21.4.2022 & 22.4.2022	Research Orientation and Quality Publication	Mother Teresa Women's University, Madurai
8.	21.12.2021 & 22.12.2021	Awareness on Cyber Security to prevent Cyber Crime among Adolescent Girls	Mother Teresa Women's University, Madurai
9.	28.10.2021 & 29.10.2021	Intelligent Computing Systems	Mother Teresa Women's University, Madurai
10.	13.2.2020 to 19.2.2020	Artificial Intelligence and Machine Learning	Mother Teresa Women's University, Madurai
11.	6.1.2020 – 8.1.2020	Empowering Underprivileged Rural Women as Entrepreneur via Skill Training Programmes in and around Madurai District	Mother Teresa Women's University, Madurai
12.	18.12.2019	Data Science and Intelligent Systems	Mother Teresa Women's University, Madurai
13.	3.12.2019 & 4.12.2019	Machine Learning Techniques	Mother Teresa Women's University, Madurai
14.	5.8.2019	Artificial Intelligence in Education	Mother Teresa Women's University, Madurai
15.	15.3.2019	Research Orientation and Quality publication	Mother Teresa Women's University, Madurai
16.	23.07.2018	Tribal Women Empowerment via Emerging Technologies: issues and challenges	Mother Teresa Women's University, Madurai
17.	28.3.2018	Innovative Smart Technologies for Public Health Care	Mother Teresa Women's University, Madurai
18.	31.10.2017	Women Issues in the Digital Era	Mother Teresa Women's University, Madurai
19.	2.03.2017 & 3.03.2017	International Conference on “Digital India-The Unfolding Opportunities & Challenges”	Vivekanandha Institute of Information and Management studies, Thiruchencode.

PATENT DETAILS

Sl. No.	Patent Application No.	Title of the Patent	Applicant/s Name	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)
1.	202041024608 A	CORONAVIRUS PROTECTED ROOM: DISINFECTING ROOM AIR USING IOT AND MACHINE LEARNING PROGRAMMING	1)Dr. M PUSHPA RANI (PROFESSOR & DIRECTOR) 2)Dr. ILANGO PARAMASIVAM (PROFESSOR) 3)Dr. P. THIYAGARAJAN (ASSISTANT PROFESSOR)	11/06/2020	26/06/2020
2.	202041040607 A	CBDI- MEDICAL IMAGE PROCESSING: CLOUD BASED MEDICAL IMAGE PROCESSING DEVICE USING IOT TECHNOLOGY.	1)DR. M. PUSHPA RANI 2)Dr. P. KALAVATHI 3)DR. K. KAVITHA	19/09/2020	25/09/2020
3.	202041043542 A	AIWTS - WASTE TREATMENT SYSTEMS: ARTIFICIAL INTELLIGENCE ENABLED IOT BASED WASTE TREATMENT SYSTEM	1)Dr. M. PUSHPA RANI (PROFESSOR & DIRECTOR) 2)Dr. K. KAVITHA (ASSISTANT PROFESSOR) 3)Ms. MARY N PETER (RESEARCH SCHOLAR) 4)Ms. M. DHANAMALAR (RESEARCH SCHOLAR) 5)Ms. J. CHINNA (RESEARCH SCHOLAR)	07/10/2020	30/10/2020

INVITED TALK / KEYNOTE SPEAKER

1. “**Association Rule Mining Techniques**”, Institutional level Association Function, Govt. Arts College, Mudukulathur, on 31st December 2014.

2. **“Biometric Technologies”**, National Seminar on Advanced Trends in Computer Science & Technology organized by Nachiappa Swamigal Arts & Science College, Koviloor on 28th August 2015.
3. **“Advances in Biometric Systems”**, State Level Seminar on Neoteric Trends in Digital Security organized by Dr. Umayal Ramanathan College for Women, Karaikudi on 27th February 2016.
4. **Chair Person** - International Conference on Innovations in Computer Science and Technology (ICICST 2016) organized by Alagappa University, Karaikudi on 4th April 2016.
5. **“Data Mining Techniques”**, National seminar on Advanced Trends in Computer Science & Technology organized by Koviloor Andavar College, Koviloor on 24th August 2016.
6. **“Advances in Cloud Computing”**, National Seminar on Computer Science and Technology organized by Dr. Zahir Husain College, Ilayangudi on 13th February 2017.
7. **“Security in Cloud Computing”**, National Seminar on Cloud Security organized by Madurai Sivakasi Nadar Pioneer Women’s College, Poovanthi on 17th February 2017.
8. **“Advances in Technology”**, International Conference on Recent Trends in Computer Science organized by AVS College of Arts & Science, Salem on 24th February 2017.
9. **“Mobile Technology”**, Regional level Department of Computer Science & Department of Computer Applications organized by E.M.G Yadava Women’s College, Tiruppalai, Madurai on 21st March 2017.
10. **“Cloud Computing for Everyone”**, International Seminar on “Recent Trends in Communication and Computing Technologies” organized by Idhaya College for Women, Sarugani on 10th August 2018.
11. **“Image Processing Techniques”**, National Seminar on “Advanced Trends in Computer Science & Technology” organized by Nachiappa Swamigal Arts and Science College, Koviloor on 18th August 2018.
12. **“Cyber Hygiene”**, Institutional level NSS programme Govt. Arts College, Nilakkottai on 20th March 2019.
13. **“Digitization towards Success”**, Institutional level Workshop on Mushroom Cultivation and Entrepreneurship Development organized by Mother Teresa Women’s University, Pallapatti on 3rd April 2019.
14. **“Career Guidance Counseling”**, Institutional level Employability Skill Training organized by Nadar Saraswathi College of Engineering & Technology, Theni on 4th

April 2019.

15. **“5 Pen Technology and Blockchaining”**, International Seminar on “Advanced Trends in Computer Science & Technology” organized by Nachiappa Swamigal Arts and Science College, Koviloor on 16th August 2019.
16. **“Recent Trends in Data Analysis using MongoDB”**, International Webinar, Mangochi Campus, DMI-St.John The Baptist University, Malawi, Central Africa, 11th December 2023

CONFERENCE PRESENTATION

1. **“Mining Frequent Patterns using Actionable Pattern Approach”**, International Conference on Recent Trends in Computing Technology organized by Ganapathy Chettiar College of Engineering & Technology on 12th April 2013.
2. **“An Enhanced Intensified Priority based Frequent Pattern Mining Algorithm for Effective Knowledge Discovery”**, National Conference on Computer Science and Informatics(NCCSI'13) organized by Department of Computer Science & Engineering, Anna University Regional Centre, Madurai on 17th & 18th April 2013.
3. **“An Efficient Modified Apriori Algorithm for Transaction Reduction”**, National Conference on Emerging Innovative Technologies organized by Thiruthangal Nadar College, Chennai on 27th August 2014.
4. **“Aspect based Product Evaluation using Sentiment Analysis”**, International Conference on Emerging trends in Technology Science and Upcoming Research in Computer Science organized by DAV Institute of Management, Faridabad on 25th April 2015.
5. **“Purchasing through E-Payment using Debit Card System – Issues and Challenges”**, International Conference on Strategies for Sustainable Growth of E-Commerce organized by V.H.N.Senthkumara Nadar College, Virudhunagar on 24th & 25th July 2015.
6. **“Electronic Payment System”**, National Conference on Resurgence of C Language organized by Carmel College, Mala, Kerala on 31st July & 1st August 2015.
7. **“Protection of Girl Children through Social Medias”**, National Seminar on Gender Disparity in Protection of Girl Children organized by Department and Centre for Women's Studies, Mother Teresa Women's University, Kodaikanal on 15th September 2015.

8. **“A Load Balancing Mock Up based on Cloud Segregation for the Public Cloud”**, National Conference on Recent Trends in Computer Technology [NCRTCT-2015] organized by Kodaikanal Christian College, Kodaikanal on 16th September 2015.
9. **“Review on Traditional vs Cloud Premises, Data Security Issues and Challenges in various Cloud Computing”**, National Conference on Innovative Intelligence in Computer Technology organized by Adithya Institute of Technology, Coimbatore on 25th September 2015.
10. **“Issues and Challenges in Fashion Trends: Society Impacts”**, International Conference on Textile, Conference on Textile, Apparel and Fashion(INCOTAF 2015) organized by Department of Home Science, Mother Teresa Women’s University, Kodaikanal on 30th September 2015.
11. **“Women Entrepreneurs - Challenges and Suggestions to Improve Women Empowerment”**, National Seminar on Women Empowerment Milestones & Challenges organized by S.Vellaichamy Nadar College, Madurai on 8th October 2015.
12. **“An Integrated approach for Pruning Infrequent Itemsets and Hiding Sensitive Information for Association Rule Mining”**, International Conference on Modelling, Simulation and Control (ICMSC’15) organized by Karpagam College of Engineering, Coimbatore on 15th & 16th October 2015.
13. **“Hybridization of Evolutionary and Swarm Intelligence for Flexible Job shop Scheduling”**, International Conference on Big Data & Cloud organized by Sri Adi Chunchanagiri Women’s College, Cumbum on 23rd February 2016.
14. **“Issues in Girl’s Education and Steps to Improve their Education through ICT”**, National Seminar on Challenges on Girl Child’s Health, Education and Protection-Making the Right a Reality organized by Department of Political Science, Annamalai University on 17th March 2016.
15. **“PSO and ACO based approach for Solving Job Shop Scheduling Problem”**, National Conference on Value Education through Teacher Education organized by Shanthi Niketan College of Education, Uthamapalayam on 10th March 2016.
16. **“Child Rights and Rights to Education”**, National Seminar on Literature and Human Rights(HURL-16) organized by Department of English, Sree Sevugan Annamalai College, Devakottai on 28th March 2016.
17. **“Tribal Women Empowerment through ICT”**, National Seminar on Status and Development – De-Notified, Nomadic, Tribal Women and Children in Taminadu

organized by Department and Centre for Women's Studies, Mother Teresa Women's University, Kodaikanal on 25th July 2016.

18. **“Study on Various Classifier Approaches in Data Mining”**, International Conference on Digital India-the Unfolding Opportunities and Challenges organized by Mother Teresa Women's University on 2nd March 2017.
19. **“Women's Economic Empowerment through Information Technology”**, ICSSR Sponsored Two Days National Seminar on Gender Equality: Mainstreaming Women organized by Annamalai University, Chidambaram on 30th & 31st March 2017.
20. **“Rescue Technique Awareness for Adults in Post Crash Care Accident Using Mobile Application”**, National Conference on Public Health Informatics-The Future Perspective organized by Vivekanandha Institute of Information & Management Studies, Tiruchengode on 30th & 31st August 2017.
21. **“Survey on Enriching Social Work through Social Media”**, National Conference on Professional Social Work: Look ..Beyond the Horizon organized by Alagappa University, Karaikudi on 26th October 2017.
22. **“Impact of Digitalization in Women Empowerment”**, National Conference on Women Issues in the Digital Era organized by Mother Teresa Women's University, Kodaikanal on 31st October 2017.
23. **“Implementing Joint Scheduling Approach in Cloud Computing for Energy Optimization”**, International Conference on Advances in Computer Science, Engineering and Technology organized by Kalaslingam University, Krishnankoil on 19th January 2018.
24. **“Essentials Threats and Concerns in Cyber Security”**, National Conference on Cyber Security organized by Alagappa University, Karaikudi on 25th January 2018.
25. **“Crowd Sourcing Systems: Approaches and Applications”**, International Conference on Cyber Security and E-Governance organized by Kodaikanal Christian College, Kodaikanal on 14th September 2018.
26. **“Changing Dimensions of Tribal Markets Through Social Media Platform with Reference to Kodaikanal”**, International Conference on Smart I5 – Individual-Institution-Industry-India-International organized by Adaikalamatha Institute of Management And Research, Thanjavur on 27th October 2018.
27. **“Critical Inspection on Real Time Crowd Sourcing Systems”**, International Conference on Emerging Trends in Engineering & Technology organized by Pandian Saraswathi Yadav Engineering College, Sivagangai on 15th March 2019.

28. **“An Efficient Machine Learning Approach for Better Recruitment Through Crowd Sourcing”**, National Conference on State of Art Technologies and its Impact on Transforming the World organized by Kodaikanal Christian College, Kodaikanal on 19th September 2019.
29. **“An Efficient Node Priority & Thershold Based Portioning Algorithm for Graph Processing”**, International Conference on Technology Innovation and Data Sciences organized by Lincoln University College, Malaysia on 11th & 12th October 2019.
30. **“Reliable and Balanced Distribution Based Crowd Sourcing Task Assignment”**, 2nd International Conference on Engineering and Advancement in Technology-2021 organized by Lords Institute of Engineering and Technology, Hyderabad on 16th & 17th July 2021.
31. **“An Automatic IP Auto configuration Scheme using Harmony Search Algorithm Optimized Hybrid Extreme Learning Machine Model”**, International Conference on Science Technology and Management organized by Society for Education, Chennai on 15th August 2021.
32. **“Multi-Level Thresholding Partitioning Algorithm for Graph Processing in Cloud Computing”**, Springer – 3rg International Conference on Mobile Computing and Sustainable Informatics organized by Tribhuvan University, Nepal on 27th & 28th January 2022.
33. **“A Brief Survey on Applying New Innovative Techniques to Identifying Crop Yield Improvement using Insect Images”**, International Conference on Recent Revolutions in Mathematics, Computer Science & Computer Applications organized by Agurchand Manmull Jain College, Chennai on 9th & 10th September 2022.