### DR K.SHYAMALA

**Associate Professor** 

PG & Research Department of Computer Science

Dr Ambedkar Government Arts College Chennai, Tamil nadu, India 600 039

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# PERSONAL DETAILS

Name: Dr K.Shyamala

Designation: Associate Professor of Computer Science

Head of the Department of Social Work (I/C)

Academic Qualification: MSc., MPhil., PhD., MBA

### **WORKING EXPERIENCE**

• From Aug' 90 to Apr' 97

College : Vysya College, Salem.

Post Held : Lecturer in Computer Science

Nature of Job: Teaching

• From Oct'98 to May'2000 (**Government Service**)

College : Government College for Women, Krishnagiri.

Post Held : Lecturer in Computer Science

Nature of Job: Teaching

• From June'2000 to till date (**Government Service**)

College : Dr. Ambedkar Govt. Arts College, Chennai – 39.

Post Held : Associate professor in Computer Science

Nature of Job: Teaching and research activities

• 30 years of teaching and research experience.

# AREA OF SPECIALIZATION

• Data Mining, Agent based Computing, Computer Networks, WBAN, Cloud Computing

### RESEARCH SUPERVISOR

Recognised Research Supervisor in University of Madras, Chennai.

# Research Scholars guided

- MPhil (Computer Science) 25
- Ph.D (Computer Science)
  - $\circ$  Completed 08
  - Thesis/Synopsis submitted 01

### **RESEARCH ACTIVITIES**

### **Editorial Board Member**

- International Journal of Advanced Computer Science and Technology (IJACST) Research India Publications.
- International Journal of Statistics and Analysis (IJSA) Research India Publications.

#### **Author for Books**

- 1. **K. Shyamala** and A. Murugan, *Dictionary of Computer Terms*, Margham Publications, 2011, ISBN No: 978-93-81430-00-2.
- 2. A. Murugan, **K.Shyamala** and Grasha Jacob, *Visual Basic Programming A step by step approach*, Margham Publications, 2011, ISBN No: 978-93-81430-05-7.
- 3. A. Murugan, **K.Shyamala** and T. Sunitha Rani, Client/Server Computing, Margam publications, 2016, ISBN No: 978-93-83242-35-1.

# **Doctoral Committee Member**

• Served / Serving as Doctoral Committee member in University of Madras, Vels University.

### Viva Voce Examiner

Served as Viva Voce Examiner in University of Madras, Vels University.

#### **Journal Publications**

- 1. **K. Shyamala** and S.P.Rajagopalan, *Data mining model for a better higher educational system.* Information Technology Journal. J. 5: Pages 560-564, 2006.
- 2. **K. Shyamala** and S.P.Rajagopalan, *Mining student data to characterize drop out feature using clustering and decision tree techniques*. International Journal of Soft Computing 2(1) Pages 150-156, 2007.
- 3. **K. Shyamala** and S. P. Rajagopalan. *Mining essential and interesting rules for efficient prediction.* Asian journal of information technology, 6(11), 1192-1195, 2007.
- 4. **K. Shyamala** and S. P. Rajagopalan. *A Framework for Predictive Data Mining Using Cluster Based Classification*. Journal of Computer science and Applications, 1(3): 153-163, 2008
- 5. A. Murugan and B.Lavanya and **K. Shyamala.** A Novel Programming Approach for DNA Computing. International Journal of Computational Intelligence research, 7(2):199-209, 2011.
- 6. Shantha Visalakshi. U and **K. Shyamala**. *Multi-agent co-ordination in distributed E-learning environments: Providing access permissions*, International Journal of Engineering and Technology (IJET), 5(2): P 1306-1309, 2013.

- 7. T. Sridevi, **K. Shyamala** and A. Murugan. *An innovative algorithm for feature selecton based on rough set with fuzzy c-means clustering*, Journal of Theoretical and Applied Information Technology (JATIT) E-ISSN 1817-3195, ISSN 1992-8645, Vol 68(3) Pages 514- 522, 2014.
- 8. **K.Shyamala** and S. Sudha Prabha. *An Ant Colony Optimization approach to solve Travelling Salesman Problem*. International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN:2321-8169, Vol 2 (12), P 3966-3971, 2014.
- 9. M. Jayachandran and **K. Shyamala.** *Knowledge Management System development by deploying ART Artificial Neural Networks Algorithm.* International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), ISSN 2395-1990, 1(2): 486-492, April 2015.
- 10. **K. Shyamala** and K. Vijay Kumar. *Distributed Text Mining An Approach To Sentiment Analysis*. International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562, 10(6):14319-14335, 2015.
- 11. **K. Shyamala** and T. Sunitha Rani. *An Analysis on Efficient Resource Allocation Mechanisms in Cloud Computing*. Indian Journal of Science and Technology, ISSN 0974-5645, Vol 8(9): 814-821, May 2015.
- 12. A.Muthulakshmi and **K. Shyamala**. A New Emergency handling Mechanism and Data rate based slot allocation for WBAN. International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562, 10(12):31291-31308, 2015.
- 13. **K. Shyamala** and Shantha Visalakshi. U. *Mitigating IP spoofing to enhance security in Multi-agent based E-learning Environment*. Indian Journal of Science and Technology, ISSN 0974-6846, Vol 8(17): August 2015.
- 14. S. Thilaka and **K. Shyamala**. An analytical study on the Usefullness of Priceless Government Laptops. International Journal of Engineering Sciences and Management Research (IJESMR), ISSN 2349-6193, Vol 2(8): 84-90, August 2015.
- 15. R. Arunkumar and **K. Shyamala**. *Analysis of Air pollutant levels using Artificial Neural Network in Chennai City*. Indian Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), ISSN 2395-1990, Vol 1(4): 361-367, August 2015.
- 16. **K. Shyamala** and S. Thilaka. *A framework for an Agent based Computing using Data mining technique for Priceless Laptop Scheme of Tamilnadu Government*. Indian Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), ISSN 2395-1990, Vol 1(5): 116-123, Sep 2015.
- 17. A.Muthulakshmi and **K. Shyamala.** *Queuing based emergency handling in WBAN*. International Journal of Engineering and Technology (IJET), ISSN 0975-4024, Vol 7(6): 221-2239, December 2015.
- 18. P.Chanthini and **K. Shyamala**, A Survey on Parallelization of Neural Network using MPI and OpenMp, Indian Journal of Science and Technology, ISSN 0974-6846, Vol 9(19), May 2016.
- 19. .S.Padmasini and **K. Shyamala**, *Data Mining in Automotive Customer Management*. International Journal of Data Mining technique and Application (IJDMTA), ISSN 2278-2419, Vol 5(1), June 2016.
- 20. S. Kalaivani and **K. Shyamala**, A Novel technique to pre-process Web log data using SQL ServerManagement Studio, International Journal of Advanced Engineering Management and Science, Vol 2(7):2454-1311, July 2016.

- 21. S.Ramya and **K. Shyamala,** *An Empirical Study on Consumer Preference for Mobile Service Providers using Agent Based Framework*, International Journal of Current trends in Engineering and Research (IJCTER), ISSN 2455-1392, Vol 2(8), August 2016.
- 22. Muthulakshmi, A., and **K. Shyamala**. Efficient Patient Care Through Wireless Body Area Networks—Enhanced Technique for Handling Emergency Situations with Better Quality of Service, Wireless Personal Communications: SPRINGER PUBLICATIONS 1-15 (2017).
- 23. K. Vijay Kumar, **K. Shyamala**, D. Naresh. *Prediction Model on Knee Osteoarthritis*, International Journal of Control theory and Applications Vol 10 (23), 2017.
- 24. K. Vijay Kumar, **K. Shyamala**, *Data in Big Data A Quality introspection*, International Journal of Control theory and Applications Vol 10(23), 2017.
- 25. P. Chanthini, **K. Shyamala**, Neural darwinism inspired implementation of an artificial neural network model, International Journal of Control theory and Applications Vol 10(23), 2017.
- 26. S. Kalaivani and **K. Shyamala,** Clustering of Web Users behavior Based on the Session Identification through Web Server Log File, International Journal of Control theory and Applications Vol 10(23), 2017
- 27. T Marikani and **K. Shyamala**, *Prediction of Heart Disease using Supervised Learning Algorithms*. International Journal of Computer Applications 165(5):41-44, May 2017.
- 28. R. Parvathi and **K. Shyamala**, *Survey of Deploying Wireless Sensor Networks with Fault-Tolerance for Structural Health Monitoring*, International Journal for Science and Advance Research in Technology Vol 3(6): 808-812, June 2017.
- 29. T.Sunitha Rani and **K.Shyamala**, *Task Scheduling on Virtual machines using bat strategy for efficient utilization of resources in Cloud Environment*, International Journal of Engineering and Applied research (IJAER), ISSN 0973-4562, Volume 12, Number 17 (2017), pp 6333-6669.
- 30. **K. Shyamala** and R. Parvathi, *Mobile Coordinated Wireless Sensor Networks with Fault-Tolerance for Structural Health Monitoring*, International Journal in Recent and Innovation Trends in Computers and Communication Vol 5(7): 283-287, July 2017.
- 31. **K.Shyamala** and T.Sunitha Rani, *An Empirical study of Efficient Resource Allocation using Particle Swarm Modified Optimization in Cloud Environment*, Journal of Advanced Research Dynamical and Control Systems Special issue 15, page 13 951-955, Dec 2017.
- 32. C.S.Padmasini and **K.Shyamala**, *Prediction of Automotive Customer Choice through Classification techniques*, International Journal of Computing and Applications vol 13(1): 131-137, 2018.
- 33. C.S.Padmasini and **K.Shyamala**, A Novel K-Tree-Bayes based Multi-model Business Risk Prediction for structured and Unstructured Automotive Customer data, International Journal of Pure and Applied Mathematics Vol 119 (15):105-1414, 2018.
- 34. T.Sunitha Rani and **K.Shyamala**, Criteria based Optimal Resource Placement Modeusing Analytic Hierarchy Process in Cloud Environment, International Journal of Pure and Applied Mathematics Vol 119 (15):515-524, 2018.
- 35. **K.Shyamala**, P.Chanthini R.Krishnan, A.Murugan, Adoption of Combinatorial Graph for Inhibitory Process in Optimization Problems, International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562, 13(13):11261-11266, 2018.

- 36. **K.Shyamala**, P.Chanthini R.Krishnan, A.Murugan, Artificial Neural Network Model Adopting Combinatorial Inhibition Process in Multiple Solution Problems, International Journal of Engineering & Technology 7(3.4):167-173, 2018.
- 37. **K.Shyamala** and S.Kalaivani, Application of Monte Carlo Search for Performance Improvement of Web page Prediction, International Journal of Engineering & Technology 7(3.4):167-173, 2018.
- 38. **K.Shyamala** and M.Sowbaghya, Fuzzy K-Means Clustering Technique for Energy efficient Routing in Wireless Sensor Networks, International Journal of Business Intelligence and Innovations 74-83, Sep 2018.
- 39. T.Marikani and **K.Shyamala**, Modified Multinomial Naïve Bayes Algorithm for Heart Disease Prediction, Intelligent Communication Technologies and Virtual Mobile Network (ICICV), Lecture Notes on Data Engineering and Communication Technologies, Springer, Vol 33, Online ISBN: 97-3-030-28364-3, Aug 2019.
- 40. **K.Shyamala** and T.Marikani, A New Cygnus Optimization Algorithm for Prediction of Cardio Vascular Disease, International Journal of Innovative technology and Exploring Engineering (IJITEE), ISSN:2278-3075 Online, Vol 8(12), pp:4351-4355, Oct 2019.
- 41. I.Rajeshwari and **K.Shyamala** Study on Performance of Classification Algorithms Based on the Sample Size for Crop Prediction, Springer Nature Switzerland AG 2020 S. Smys et al. (Eds.): ICCVBIC 2019, Advances in Intelligent Systems and Computing Volume 1108 (AISC 1108), pp. 1051–1058, 2020., <a href="https://doi.org/10.1007/978-3-030-37218-7\_110">https://doi.org/10.1007/978-3-030-37218-7\_110</a>
- 42. T.Rekha and **K.Shyamala**, A Framework for Agent based Data Mining Classification on Allergy induced Asthma Patients, International Journal of Research in Engineering, Science and Management (IJRESM), ISSN: 2581-5792, 2(9):136-141, Sep 2019.
- 43. T.Rekha and **K.Shyamala**, An Analytical Study of Allergy induced Asthma Patients using Agent based Data Mining Techniques, International Journal of Research in Engineering, Science and Management (IJRESM), ISSN: 2581-5792, 2(10):128-132, Oct 2019.
- 44. I.Rajeshwari and **K.Shyamala**, Perfrmance of Classification Algorithms for Prediction of Crop cultivation by reducing the Dimensionality of a Data Set, International Journal Of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, 8(4), November 2019.
- 45. **K.Shyamala** and C.S.Padmasini, A Prediction to choose Customers in Auto Ancillary Automotive Products using K-Tree-Bayes Model for improving Business Profits and Retention, International Journal Of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, 8(4), November 2019.
- 46. M.Mercy Evangeline and **K.Shyamala**, Noun Identification for Tamil Language using morphophonemic Rules, International Journal Of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, 8(4), November 2019.
- 47. **K.Shyamala**, K.Vijay Kumar, Sheran Dass, Sentiment Severity on Location Based Social network (LBSN) Data of Natural Disasters, International Journal Of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, 8(5), January 2020.
- 48. C.S.Padmasini and **K.Shyamala**, "PCAEBK-Means Model: A Novel approach to determine Number of Clusters in Auto Component Customers", International Journal of Scientific and Technology research, ISSN:2277-8616, 9(2), Feb 2020.
- 49. G.Fathima and **K.Shyamala**, Analysis of Air pollutant level using Data Mining techniques in Chennai City, International Journal of Engineering technology research and Management (IJETRM), ISSN:2456:9348, 4(2):47-54, Mar 2020.

- 50. I.Rajeshwari and **K.Shyamala**, Enhanced Gradient Boosting Regression Tree For Crop Yield Prediction, International Journal of Scientific & Technology Research (IJSTR), ISSN: 2277-8616, 9(3):1651-1654, March 2020.
- 51. I.Rajeshwari and **K.Shyamala**, Study on Performance of Clustering Algorithms for the prediction of fertilizer, Journal of Analysis and Computation (JAC), www.ijaconline.com, ISSN 0973-2861, Volume XIII, Issue III, pp 121-129, March 2020.
- 52. **K.Shyamala** and I.Rajeshwari, A Modified Agglomerative Hierarchical Clustering Approach for Fertilizer Suggestion, International Journal of Analytical and Experimental Modal Analysis (IJAEMA), ISSN NO:0886-9367, Volume XII, Issue III, pp. 2472 2480, March 2020.
- 53. T.Marikani and **K.Shyamala**, A Novel Dyno Quick reduct Algorithm for Heart Disease Prediction using Supervised learning Algorithm, New trends in Computational Vision and Bio Inspired Computing, <a href="https://doi.org/10.1007/978-3-030-41862-5\_24">https://doi.org/10.1007/978-3-030-41862-5\_24</a>, © Springer Nature Switzerland, AG 2020.
- 54. **K.Shyamala** and I.Rajeshwari, "Prediction of Crop Price Using Enhanced Exponential Smoothing" in Alochana Chakra Journal, ISSN NO: 2231-3990, Volume IX(IV): 4387-4393, April 2020.
- 55. Marikani.T and **K.Shyamala** "Information Fusion based on Modified Proportional Conflict Redistribution Rules for cardiovascular disease prediction", Alochana Chakra Journal, ISSN:2231-3990, Vol 9(4), pp 4375-4382, April 2020.
- 56. **K.Shyamala** and I.Rajeshwari, "Enhancing Linear SVM by Oversampling for Crop Disease Prediction" in Alochana Chakra Journal, ISSN NO: 2231-3990, Volume IX( V): 1979-1984, May 2020.
- 57. **K.Shyamala** and I.Rajeshwari, "A Framework to Assist Farmers in Choosing the Profitable Crop for Cultivation and Crop Disease Identification", Alochana Chakra Journal, ISSN NO: 2231-3990, Volume IX(V):6178-6184, May 2020.
- 58. C.S Padmasini and **K. Shyamala**, "An Integrated Gower based PSO-KMode Clustering Model for Business Solutions through Existing Customer Assessment", Alochana Chakra Journal, ISSN: 2231-3990, Volume IX(V):10-20, May 2020.
- 59. S.Shalini and **K.Shyamala**, "A Survey on Wireless Body Area Networks in Health Care Monitoring", International Journal of Engineering technology Research and management (IJETRM), ISSN:2456:9348, 4(6):30-37, June 2020.
- 60. **Shyamala.K** and Marikani.T, "Prediction of Cardiovascular Disease using proportional Conflict redistribution", Alochana Chakra Journal, ISSN NO: 2231-3990, Vol VI(IX):7412-7422, June 2020
- 61. M.Mercy Evangeline and **K.Shyamala**, "Verb Identification using morphophonemic Rules in Tamil Language", ICTACT Journal of Soft Computing, ISSN: 2229-6956, Volume 11(1):2237-2243, October 2020.
- 62. G.Fathima and **K.Shyamala**, "Agent based Framework for the Analysis of Air Pollutant level using Data Mining Techniques in Chennai City", International Journal of Engineering Technology Research and Management (IJETRM), ISSN:2456:9348, 4(12), Dec 2020.
- 63. Shyamala.K and CS Padmasini, "Performance of HAF in attention-BiLSTM for predicting the quality of automobile ancillary suppliers", Journal of Mathematical and Computational Sciences, Vol 11(4):4301-4313, February 2021.

- 64. Chris M. Jayachandran and **K. Shyamala**, "Efficacy of K-means and Hierarchical Clustering Machine learning algorithms in Diagnosing Personality disorders", Journal of Education, ISSN:0972-175, Vol XXIII: 6(II), pp124-127, June 2021.
- 65. Shyamala.K and CS Padmasini, "A framework for Prediction of buying behavior of Automotive Ancillary through Business Partners through Machine Learning Algorithms", Design Engineering, Vol 2021(6), pp5675-5682, Sep 2021.
- 66. K.Shyamala and S.Yamuna, "A Study on Prediction of Covid-19 cases in Data Mining Techniques", International Journal of Engineering Technology Research and Management (IJETRM), ISSN:2456:9348, 5(9), Sep 2021.
- 67. S.Yamuna and K.Shyamala,"Analysis and Prediction of Covid-19 cases in Tamil Nadu using Data Mining techniques", International Journal of Engineering Technology Research and Management (IJETRM), ISSN:2456:9348, 5(9), Sep 2021.
- 68. K.Shyamala and Chris M.Jayachandran, "Deploying PsyKohonen Unsupervised Machine learning Algorithm for Diagnosing personality Disorders in three clusters as per DSM-5, Design Engineering, Vol 2021(6), pp5731-5739, Sep 2021.

#### **Conference Publications**

- 1. **K. Shyamala** and S.P.Rajagopalan, *Attribute Selection of Decision Tree Induction*. National Conference on Computer Science and Informatics, P 18 (Abstract), St Joseph's College, Trichy, India, Feb 2005.
- 2. Chris M. Jayachandran and **K. Shyamala**, *Psychogenetic Neural Reprogramming Deploying Kohonen Self-Organizing Neural Networks with a thrust on Neuropsychiatry*. National seminar on BIO-COMPUTING (NSBC), P-31, March, 2009.
- 3. **K. Shyamala** and U.Shantha Visalakshi, *Agent based formal models for access mechanism*. In prodeedings of the International Conference on "Mathematics, Engineering and Business Management Studies (ICMEB-2012)" P 392-394, Stella Mary's College, Chennai, India, March 2012.
- 4. S. Selvam and **K. Shyamala**, *Study on performance of Classification techniques using Cervical cancer*. International Conference on Emerging Trends and Challenges in Science & Technology (ICETCST), P 263-269, March 2013.
- 5. U. Shantha Visalakshi and **K.Shyamala**, *Overview of incorporating enhanced security aspects in a multi-agent E-learning environments*. International Conference on recent trends in Computer Applications (ICRTICA), September 2013.
- 6. **K.Shyamala** and A.Muthulakshmi, *Mobility Aware MAC protocols in Wireless sensor networks*. International Conference on recent trends in Computer Applications (ICRTICA), September 2013.
- 7. T. Sunitha Rani and **K.Shyamala**, *IP Based Geo-location for Cloud Resource Placement*, 3<sup>rd</sup> National Conference on Recent Advances in Computing and Communications, P 76-80, SSS Jain College for Women, Chennai, India October 2015.
- 8. P.Chanthini and **K.Shyamala**, A Survey on Parallelization of Neural Network using MPI and OpenMp. International Conference On Recent Trends In Computing Technology (ICRTCT) February 2016.
- 9. C.S.Padmasini and **K.Shyamala**, Data *Mining in Automotive Customer Management*. International Conference On Recent Trends In Computing Technology (ICRTCT) February 2016.

- 10. Chris M. Jayachandran and **K. Shyamala,** Machine Learning through SOM Neural Network Algorithm in the Domain of Cognitive Neuropsychology, National Conference on Human Computer Interaction-2016, NCHCI2016, Department of Computer Science (PG), Kongu Arts and Science College (Autonomous), Erode 638107, Tamilnadu, India.
- 11. Chris M. Jayachandran and **K. Shyamala**, Kohonen Self Organizing Neural Network Algorithm Deployment in Android App-based Cognitive Behavioural Therapy for Personality Disorders, International Conference World Congress on Computing 7 communication Technologies (WCCCT-2016), St.Josephs College, Tiruchirapalli 620 002, Tamilnadu, India.
- 12. T. Sunitha Rani and **K. Shyamala**, *Fuzzy Logic Model for Load balancing in Cloud*, 4<sup>th</sup> National Conference On Recent Advances in Computing and Communications, SSS Jain College for Women, Chennai, India December 2016.
- 13. T. Sunitha Rani and **K. Shyamala**, *Android based Quick response Code Authentication In Cloud for Student Information System*, 4<sup>th</sup> National Conference On Recent Advances in Computing and Communications, SSS Jain College for Women, Chennai, India December 2016.
- 14. **K. Shyamala**, A.Muthulakshmi, *Enhanced Medium Access Technique to Handle Emergency in Wireless Body Area Networks*, International Conference on Microelectronics Devices, Circuits and Systems (ICMDCS 2017), VIT University, Vellore, August 10-12, 2017.
- 15. Shantha Visalakshi. U and **K. Shyamala**, *A Novel and Secured Multi-Agent based Distributed Architecture for E-learning Environment*, International Conference on Microelectronics Devices, Circuits and Systems (ICMDCS 2017), VIT University, Vellore, August 10-12, 2017.
- 16. I. Rajeshwari and **K.Shyamala**, *A Survey on Appications of Data mining techniques in Crop Rotation*, International Conference on Recent Trends in Computing technology, Bharat University, Chennai, 21<sup>st</sup> April 2017.
- 17. **K. Shyamala**, P. Chanthini *A Novel Approach in Solving 0/1 Knapsack Problem Using Neural Selection Principle*, IEEE International Conference on Power, Control, Signals and Instrumentation Engineering, (ICPCSI 2017), Issue-III, pp:305-309, Aug 21 & 22, 2017
- 18. **K. Shyamala**, S. Kalaivani *An Effective Web page Reorganization through Heap Tree and Farthest First Clustering Approach*, IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), Issue-IV, pp:263-266, August 21 & 22, 2017
- 19. G.Priyadarshini and **K.Shyamala**, Data Governance on Local Storage in Offsite, Fifth International Conference on Emerging research in Computing, Information, Communication and Applications ERCICA July 2018, NMIT Bangalore.
- 20. M.Mercy Evangeline and **K.Shyamala**, Stop Word Removal Algorithm for Tamil Language, International Conference on Recent Innovations in Electrical, Electronics and Communication Engineering IEEE-ICRIEECE, Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha, July 2018.
- 21. **K.Shyamala** and Gnana Vidhya.Y, Visual Cryptography for grayscale image using Latin Square, National Conference on innovative Information technologies, Tiruthangal Nadar College, Chennai, India, Sep 2018.
- 22. **K.Shyamala** and Sowbaghya.M, Fuzzy k-Means Clustering technique for energy efficient Routing in Wireless Sensor Networks, National Conference on innovative Information technologies, Tiruthangal Nadar College, Chennai, India, Sep 2018.

- **23.** I.Rajeshwari and **K.Shyamala**, "Study on performance of Classification Algorithms for Prediction of Crop Cultivation", in Springer first International Conference on "Advances in Electrical and Computer Technologies 2019" on 26 27, April 2019 at Coimbatore.
- 24. Jane Nithya and **K.Shyamala**, "A Systematic review on various Attack Detection method for Wireless Sensor Networks", 4<sup>th</sup> International Conference on Innovative Computing and Communication (ICICC-2021), Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India, February 2021.
- 25. K.Shyamala and C.S.Padmasini, "Mtanh-attention biLSTM model for prediction of Automobile Export Customer Prediction", International Conference on Artificial Intelligence and Smart Systems (ICAIS), 652-660, IEEE, Electronic ISBN:978-1-7281-9537-7,DVD ISBN:978-1-7281-8381-7, Print on Demand(PoD) ISBN:978-1-7281-9538-4, **DOI:** 10.1109/ICAIS50930.2021.9395837
- **26.** S.Sujatha and **K.Shyamala**, "Prediction of Air pollution using Data Mining techniques", International Conference on Electrical Sciences ICES-2021, SNS College of Technology, Coimbatore, India, March 4<sup>th</sup> & 5<sup>th</sup>, 2021.
- 27. M.Mercy Evangeline and **K.Shyamala**, "Frequency based feature extraction technique for text documents in tamil language", 5<sup>th</sup> International Conference on Advances in Computing and Data Sciences (ICACDS 2021), MVPS'S Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik, Maharashtra, India, April 23-24, 2021.
- 28. R.Sujatha and **K.Shyamala**, "Analysis of Air Pollution data for Prediction of Air Quality levels", International Conference on Artificial Intelligence & its impact on Transforming Business processes, Rathinam College of Arts & Science, Coimbatore, India, May 21-22, 2021.
- 29. **K.Shyamala** and R.Sujatha, "Analysis and Prediction of Air Quality Index in Chennai during Pre and Post Covid pandemic using Machine learning algorithms", International Conference on Artificial Intelligence & its impact on Transforming Business processes, Rathinam College of Arts & Science, Coimbatore, India, May 21-22, 2021.

# **Workshops/Seminars Attended**

- 1. National Workshop and Public Appraisal by Mother Teresa Women's University Research and Extension Centre, Madurai, Dec 2004.
- 2. National Workshop on Data mining using Rough Set Theory conducted by Department of Computer Science, Perivar University, Salem, March 2007.
- 3. Short term course for Researchers to prepare 'Research Projects (Minor/Major)", 10/10/2011 to 14/10/2011.
- 4. National Workshop on Research methodology & Scientific Research Article Writing Conducted by PG & Research Department of Computer Science, Dr Ambedkar Government Arts College, Chennai, India, 25<sup>th</sup> September 2015.
- 5. One day State Level Seminar on Higher Education for All, Organized by Tamilnadu Government College Teachers Association held at University of Madras on 12<sup>th</sup> October 2015.

# Workshops/Webinars Organized

- 1. Organizing Secretary for National Workshop on "Big Data Analytics" Sep 19<sup>th</sup> & 20<sup>th</sup> 2014, Dr Ambedkar Government Arts College, Chennai 39.
- 2. Organizing Secretary for Regional Seminar on "Recent Trends in Computing" Feb 12<sup>th</sup> 2020, Dr Ambedkar Government Arts College, Chennai 39.
- 3. Organizing Secretary for Webinar On "Intelligence Automation in Infrastructure Services" 31<sup>st</sup> May 2020, Dr Ambedkar Government Arts College, Chennai 39.
- 4. Conducted Webinar on "Millenials in the New Normal" 20<sup>th</sup> June 2020, Dr Ambedkar Government Arts College, Chennai 39.
- 5. Conducted Webinar on "Project Proposal Writing", 18<sup>th</sup> July 2020, Dr Ambedkar Government Arts College, Chennai 39.
- 6. Organizing Secretary for Webinar on "Agile process", 12<sup>th</sup> August 2020, Dr Ambedkar Government Arts College, Chennai 39.
- 7. Conducted Webinar on "Trafficking during pandemic", 24<sup>th</sup> June 2021, Dr Ambedkar Government Arts College, Chennai 39.
- 8. Conducted Webinar on "Exemplary Siddha Lifestyle Methods for Healthy Life", 28<sup>th</sup> June 2021, Dr Ambedkar Government Arts College, Chennai 39.
- 9. Conducted Webinar on "Take the Lead when there is Need", 29<sup>th</sup> June 2021, Dr Ambedkar Government Arts College, Chennai 39.
- 10. Organizing Secretary for Webinar on "Recent Technologies and Opportunities in IT", 3<sup>rd</sup> July 2021, Dr Ambedkar Government Arts College, Chennai 39.

# **Technical Advisory/Programme Committee Member**

- International Conference on Recent trends in Computing Technology ICRTCT 2016 Organised by Department of Computer Science, IDE, University of Madras, Chennai, India on 22<sup>nd</sup> and 23<sup>rd</sup> Feb 2016.
- National Conference on Recent trends in Intelligent Systems Conducted by Department of Computer Science, University of Madras, Chennai India on 12<sup>th</sup> and 13<sup>th</sup> March 2015.
- National Conference on Information Security Practices (NCISP' 2015) Organised by Department of Computer Science, J.H.A Agarsen College, Madhavaram, Chennai, India on 9<sup>th</sup> & 10<sup>th</sup> Jan 2015.
- Second International Conference on Communication & Computing & Information Technology Organised by M.O.P Vaishnav College for Women, Chennai, India on 12<sup>th</sup> & 13<sup>th</sup> Dec 2014.
- First International Conference on Communication & Computing & Information Technology Organised by M.O.P Vaishnav College for Women, Chennai, India on 21<sup>th</sup> & 22<sup>th</sup> Dec 2012.

### **Session Chair in Conferences**

• International Conference on "Innovations in Disruptive technologies", Organised by Sri Kanya Parameswari Arts & Science College, Chennai, India on 28<sup>th</sup> & 29<sup>th</sup> July 2021.

- First International Conference on Communication & Computing & Information Technology Organised by M.O.P Vaishnav College for Women, Chennai, India on 21<sup>th</sup> & 22<sup>th</sup> Dec 2012.
- Fourth International Conference on Communication & Computing & Information Technology Organised by M.O.P Vaishnav College for Women, Chennai, India on 15<sup>th</sup> & 16<sup>th</sup> February 2019.

#### **Reviewer of Conferences**

- International Conference on Recent trends in Computing Technology ICRTCT 2016 Organized by Department of Computer Science, IDE, University of Madras, Chennai, India on 22<sup>nd</sup> and 23<sup>rd</sup> Feb 2016.
- International Conference on Computing and Intelligence Systems (ICCIS '2015) Organized , by PG and Research Department of Computer Science D G Vaishnav College, Chennai, India on 19<sup>th</sup> to 21<sup>st</sup> March 2015.
- National Conference on Recent trends in Intelligent Systems Conducted by Department of Computer Science, University of Madras, Chennai, India on 12<sup>th</sup> and 13<sup>th</sup> March 2015.
- National Conference on Information Security Practices (NCISP' 2015) Organised by Department of Computer Science, J.H.A Agarsen College, Madhavaram, Chennai, India on 9<sup>th</sup> & 10<sup>th</sup> Jan 2015.
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### BOARD OF STUDIES MEMBER/ ACADEMIC AUDIT COMMITTEE

- Convener of Academic audit committee, Sri Kanya Parameswari Arts & Science College, Chennai, Sep 14<sup>th</sup> 2021
- Board of Studies Chairman for UG Computer Science, Madras University April 2018 to March 2021.
- Subject Expert (University Nominee) for Board of Studies for BCA, SDNB College for Women
  Sep 2016 to Aug 2018.
- Subject Expert for Academic Audit of Patrician College of Arts & Science, Chennai Sep 2016.
- Chairperson of Academic Audit Committee, Loyola College, Chennai during March 2009.
- Quaid-E-Millath Govt. College for Women, Chennai (Subject Expert) UG
- Bharathi Women's College, Chennai (Subject Expert) UG.

# CONTRIBUTIONS TO THE COLLEGE/UNIVERSITY

- Served as coordinator for Computer Literacy Programme (CLP) in the college from 2000 to 2019.
- Recognized Research Supervisor for M.Phil in Computer Science from 2003.
- Recognized research Supervisor for Ph.D in Computer Science from 2011.
- Expert Committee Member in various Selection Committees and Purchase Committees.
- Expert Committee Member in various inspection Committees.
- Subject Expert for Staff recruitment for TRB and various colleges.
- Member of Question Paper Setting Boards of other Universities and Autonomous Colleges.
- Member of College Discipline Committee.
- Question paper setter for various Universities, Autonomous colleges and Tamil Nadu Public Service Commission (TNPSC).
- Chairman, Question paper setting BCA Thiruvallur University April 2011 to April 2014.
- Coordinator for RUSA (Rashtriya Ucchatar Shikshya Abihyan) and Vocational Course, 2015-2018.
- Board of Studies Chairman for UG Madras University, 2018-2021.
- Head of the Department Incharge for Social Work Department from August 2016 to till date.