

PROFORMA

Dr.K.Ruba Soundar

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EDUCATIONAL DETAILS

Doctorate Degree : **Ph.D., Computer Science and Engineering**
Year : **January 2007 to December 2010**
University : **Anna University, Chennai**
Area of Research : **Image Processing**

Post Graduate Degree : **M.E., Computer Science and Engineering**
Year : **June 2002 to April 2004**
College/University : **Mepco Schlenk Engineering College, Sivakasi,
Anna University, Chennai**

Graduate Degree : **A.M.I.E., Computer Science**
Year : **June 1996 to May 2000**
College/University : **The Institution of Engineers (India), Calcutta**

EXPERIENCE

College / Organization Name	Designation	Duration
P.S.R Engineering College, Sivakasi	Professor & Head	01.01.2011 to till date
	Assistant Professor	29.12.2008 to 31.12.2010
	Senior Lecturer	01.08.2007 to 28.12.2008
	Lecturer	01.12.2006 to 31.07.2007
Mepco Schlenk Engineering College, Sivakasi	Lecturer	23.08.2004 to 30.11.2006
	System Administrator	01.08.1996 to 22.08.2004

RESEARCH CONTRIBUTIONS

No. Research Scholars : Completed : 04 Pursuing : 09
International Journals : **48 Papers**
International Conferences : **23 Papers**

Google Scholar Citation Details :	Citations	191
	h-index	6
	i10-index	4

List of Publications in International Journals

1. **K. Ruba Soundar** and K. Murugesan, “Preserving Global and Local Information - A Combined Approach for Recognizing Face Images”, IET journal of Computer Vision (IET-CV), Vol.4, No.3, pp.173-182, September, 2010. (SCI Indexed Impact Factor : 0.636)
2. **K. Ruba Soundar** and K.Muneeswaran, “Texture Image Segmentation using Combined Features from Spatial and Spectral Distribution”, International Journal of Pattern Recognition Letters (Elsevier), Vol.27, No.7, pp.755-764, May 2006. (SCI Indexed Impact Factor : 1.266)
3. **K. Ruba Soundar** and K.Muneeswaran, “Texture Classification with Combined Rotation and Scale Invariant Wavelet Features”, International Journal of Pattern Recognition (Elsevier), Vol.38, No.10, pp.1495-1506, October 2005. (SCI Indexed Impact Factor : 3.406)
4. **K. Ruba Soundar** and K. Murugesan, “Preserving Global and Local Features - A Combined Approach for Recognizing Face Images”, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol. 24, No.1, pp.39-53, February, 2010. (SCI Indexed Impact Factor : 0.562)
5. **K. Ruba Soundar** and K. Murugesan, “Correlation based Face Matching in Combined Global and Local Preserving Feature Space”, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol.24, No.8, pp.1281-1294, December, 2010. (SCI Indexed Impact Factor : 0.562)
6. **K. Ruba Soundar** and K. Murugesan, “An Adaptive Face Recognition in Combined Global and Local Preserving Feature Space”, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol.25, No.1, pp.99-115, January 2011. (SCI Indexed Impact Factor : 0.562)
7. **K. Ruba Soundar** and K. Murugesan, “Preserving Global and Local Features for Robust Face Recognition under Various Noisy Environments”, International Journal of Image Processing (IJIP), Vol.3, No.6, pp.328-340, December, 2009.

8. **K. Ruba Soundar** and K. Murugesan, "Identification of Untrained Facial Image in Combined Global and Local Preserving Feature Space", *International Journal of Biometrics and Bioinformatics (IJBB)*, Vol.4, No.1, pp.53-64, March, 2010.
9. **K. Ruba Soundar** and J.Malini, "Facial Image Extraction Through Color Mapping Techniques", *The International Journal of Technology, Knowledge, Society*, Vol.2, No.1, pp.163-174, 2005.
10. **K. Ruba Soundar**, J.Gul Sahira Banu and P.Regga, "A Dual Factor Biometric Authentication System Using GPCA and IFB", *The International Journal of Technology, Knowledge, Society*, Vol.2, No.4, pp.83-90, 2005.
11. **K. Ruba Soundar** and N.Kavitha, "Extraction of Foreground Entities Through Adaptive Background Framework", *The International Journal of Technology, Knowledge, Society*, Vol.2, No.4, pp.27-34, 2005.
12. **K.Ruba Soundar** and K.Lekshmi, "Speech Synthesizer for Tamil using Neural Networks", *IFRSA's International Journal of Computing*, Vol.1, No.4, pp.801-806, 2011. (ISSN 2231-2153)
13. **K. Ruba Soundar** and R.Vedhapriya Vadhana, "Effective Motion Tracking of Moving Persons / Objects using MCMC Sampling method", *International Journal of Research in Engineering & Advanced Technology*, Vol.1, No.5, 2013.
14. **K. Ruba Soundar** and S. Muthukumar, "Efficiently Measuring Denial of Service Attacks Using Appropriate Metrics", *International Journal of Emerging Technology & Research*, Vol.1, No.2, pp.57-64, 2013.
15. **K. Ruba Soundar** and L.R.Priya, "Sumrate Maximization of Two Way Relay Networks using Cooperative Protocols", *International Journal of Research in Engineering & Advanced Technology*, Vol.1, No.5, 2013.
16. **K. Ruba Soundar** and C.K.Ramar, "A Survey of Data Aggregation Techniques in Wireless Sensor Networks", *International Journal of Research in Engineering & Advanced Technology*, Vol.1, No.5, 2013.
17. **K.Ruba Soundar**, C.Rajesh Kumar, "Retrieval of Encrypted cloud data using multikeyword", *International Journal of Innovative Research in Computer and Communication Engineering*, Vol.2, Special Issue 1, March 2014.
18. **K.Ruba Soundar**, Venkadalakshmi, "Framework for Efficient Job Scheduling in Cloud Environment", *International Journal for Scientific Research and Development*, Volume 2, Issue 1, 2014.
19. **K. Ruba Soundar** and N.Kavitha, "A Survey of Moving Cast Shadow Detection Methods", *International Journal of Scientific and Engineering Research*, Vol.5, No.5, May 2014. (ISSN 2229-5518).

20. R.Kesavamoorthy and **K.Ruba Soundar**, "A Survey on Distributed Denial of Service Attacks, Tools, and Countermeasures", International Journal of Emerging Researches in Engineering Science and Technology, Jan.2015 (ISSN 2393-9184).
21. N.Kavitha, **K.Ruba Soundar**, "Moving Cast Shadow Detection using Chromacity Feature on an Adaptive Background Model for Stationary and Non-Stationary Environments", International Journal of Physical Sciences, (ISSN No. 19921950, Annexure II), Vol.10, No.5, March 2015.
22. L.Thangamariappan and **K.Ruba Soundar**, "A Novel Cluster Based Wormhole Intrusion Detection Mechanism in MANET", International Journal of Emerging Researches in Engineering Science and Technology, Volume 2, Issue 3, April '15.
23. L.Thangamariappan and **K.Ruba Soundar**, "Amputating Wormhole Attack in Wireless Sensor Network Using Swarm Intelligence", ARPN Journal of Engineering and Applied Sciences, Volume 10, Issue 9, May '15. (ISSN 1819-6608)
24. L.Thangamariappan and **K.Ruba Soundar**, "Node Spot Verification Algorithm in Wireless Sensor Networks for Mitigating Wormhole Attack" ARPN Journal of Engineering and Applied Sciences, Volume 10, Issue 9, May '15. (ISSN 1819-6608)
25. K.Lekshmi, **K.Ruba Soundar**, "Retinal Blood Vessel Segmentation and Measurement of Vessel Diameters", International Journal of Applied Engineering Research, (ISSN No. 0973-4562, Annexure II), Vol.10, No.55, June 2015.
26. K.Lekshmi, **K.Ruba Soundar**, "Analysing the Performance of Adaboost Algorithm in Texton Based Multi-Class Object Segmentation and Recognition", International Journal of Applied Engineering Research, (ISSN No. 0973-4562, Annexure II), Vol.10, No.55, June 2015.
27. C.K.Ramar and **K.Ruba Soundar**, " A Survey on Data Aggregation Techniques in Wireless Sensor Networks", International Journal Mobile Network Design and Innovation, Vol.6, No.2, 2015.
28. J.Sheeba Mercy, **K.Ruba Soundar** and M.Piramu, "Blowfish Ciphering based Provable Multicopy Dynamic Data Possession in Cloud Computing", International Journal of Advanced Research in Electronics and Communication Engineering, (ISSN No. 2278-909X), Vol.5, No.4, April 2016, pp.1096-1101.
29. Mariappan, L. and **Ruba Soundar, K.** (2016) Isolating Wormhole Attack in Wireless Sensor Networks. Circuits and Systems, 7, 2036-2046. doi: 10.4236/cs.2016.78177 (ISSN No. 2153-1285, SCI Indexed Impact Factor : 0.95).
30. Ramar, C.K. and **Ruba Soundar, K.** (2016), "Prediction based Energy and Delay Aware Data Aggregation for Wireless Sensor Networks", International Journal of Advanced Engineering Technology, Vol.VII, Issue II, April – June 2016, 1286-1292. (EISSN No. 0976-3945).

31. R.Kesavamoorthy and **K.Ruba Soundar**, “Swarm Intelligence based Autonomous DDoS Attack Detection and Defense Using Multi Agent System”, International Journal of Printing, Packaging and Allied Sciences, Vol.4, Issue 1, Dec. 2016. (pp.352-363). (ISSN : 2320-4387).
32. Kavitha Nagarathinam and **Ruba Soundar Kathavarayan**, “Moving Shadow Detection in Videos using HSI Color Space along Hue Singular Pixels”, International Journal of Printing, Packaging and Allied Sciences, Vol.4, Issue 2, Dec. 2016. (pp.1217-1225). (ISSN : 2320-4387).
33. *Ramar, C.K. and **Ruba Soundar, K.** (2017), “Spatio Temporal Error Adaptation Model (STEAM) for Energy Efficient Wireless Data Gathering”, Asian Journal of Research in Social Sciences and Humanities, Vol.7, Issue 3, Mar. 2017, pp.460-480 (ISSN : 2250-1665, EISSN No. 2249-7315), DoI:10.5958/2249-7315.2017.00183.6.*
34. R.Vedha Priya Vadhana, **K.Ruba Soundar** (2017), “A Novel Video Inpainting Technique Based on Digital Notch Filtering Method”, Journal of Computational and Theoretical Nanoscience. Vol.14, No.2, 2017 (ISSN : 1546-1955, EISSN : 1546-1963). Impact Factor : 1.666, SNP 0.944, SJR : 0.32, pp.1239-1244.
35. Kavitha N and **Ruba Soundar K** “Moving Shadow Detection Based on Stationary Wavelet Transform”, EURASIP Journal on Image and Video Processing, July 2017:49. (Impact Factor: 1.742, ISSN: 1687-5281)
36. Lekshmi K, **Ruba Soundar K**, et.al., (2018), “Segmentation of Hepatocellular carcinoma and Dysplastic Liver Tumors in Histopathology images using Area based Adaptive Expectation Maximization”, International Journal on Multimedia Tools and Applications, Springer Publications. Vol.77, Issue 2, pp.1761-1782, Jan. 2018, DoI : 10.1007/s11042-016-4260-y (ISSN : 1380-7501, EISSN : 1573-7721) Impact Factor : 1.403, SNP 0.944, SJR : 0.408.
37. S.Divyalakshmi and **K.Ruba Soundar**, “Effective Storage Architecture for Evaluation of De-Duplication in Cloud Environment”, International Journal of Science and Engineering Research, Vol.6, Issue 3, pp.2072-2076, March 2018 (ISSN : 3221 568X, EISSN : 3221 5687).
38. D.Suvathi and **K.Ruba Soundar**, “Image Cloud Processing for Big Data using Static Image Cloud Processing with Hadoop”, International Journal of Creative Research Thoughts, Vol.6, Issue 2, pp.1549-1554, April 2018 (ISSN : 2320-2882).
39. Priya, L.R., **Ruba Soundar, K.**, “LTE: An Enhanced Hybrid Domain Downlink Scheduling”, Elsevier journal on Cognitive Systems Research (2018), Vol.52, Dec.2018, pp.550-555, doi: <https://doi.org/10.1016/j.cogsys.2018.07.013> (IF : 1.425, SNIP : 1.038, SJR : 0.303)
40. Kavitha Nagarathinam and **Ruba Soundar Kathavarayan** “Moving Shadow Detection Based on Stationary Wavelet Transform and Zernike Moments”, IET Computer Vision, Vol.12. Issue 6, September 2018, pp.787-795, DOI 10.1049/iet-cvi.2017.0273 (Impact Factor: 1.087, ISSN: 1751-9632, EISSN:1751-9640, SNIP:0.613, SNR:0.289)

41. Thanga Mariappan L and **Ruba Soundar K** (2018), “Isolating Wormhole Attack in Wireless Sensor Networks Using Optimal Approach”, Sensor Letters, American Scientific Publishers, Vol.16, Issue 8, August 2018, DoI : 10.1166/sl.2018.4007, pp.642-650 (ISSN : 1546-198X, EISSN : 1546-1971) Impact Factor : 0.32.
42. Azhagammal Algarsamy and **Ruba Soundar Kathavarayan**, “A Survey paper on Deep Belief Network for Big Data” International Journal of Computer Engineering & Technology (IJCET), (ISSN:0976-6375), Volume 9, Issue 5, September-October 2018, pp. 161-166.
43. Azhagammal Algarsamy and **Ruba Soundar Kathavarayan**, “Classification with Deep Belief Network for large Dataset” Journal of Emerging Technologies and Innovative Research (JETIR) (ISSN: 234-5162), Volume 5, Issue 10, October 2018.
44. Azhagammal Algarsamy and **Ruba Soundar Kathavarayan**, “Classification with MapReduce Based Deep Belief Network” International journal of Applied Engineering Research (IAER) (ISSN: 073-4562) Volume 13, Number 21 (2018).
45. Azhagammal Algarsamy and **Ruba Soundar Kathavarayan**, “Classification with Modified Deep Belief Network for Large Dataset”, International Journal of Engineering Research and Technology (IJERT) z(ISSN: 0974-3154) Volume 11, Number 10 (2018).
46. Manoharan S.N. and **Ruba Soundar K** (2019), “A Novel Securable Fuzzy Logic Based Ranking Scheme for Document Searching on Outsourced Cloud Data”, An International Journal on Wireless Personal Communications, Vol.80, Issue 3, January 2019, DoI : <https://doi.org/10.1007/s11277-018-6108-4>, (ISSN : 0929-6212) Impact Factor : 0.32.
47. S. Muthukumar and K. Ruba Soundar, “FSSAM: Detecting Wormhole Occurrence Using Five Stage Security Analysis Model in MANET”, International Journal on Applied Mathematics & Information Sciences, Vol. 13 (2019).
48. R.Kesavamoorthy, **K.Ruba Soundar** “Swarm intelligence based autonomous DDoS attack detection and defense using multi agent system”, International Journal of Cluster Computing, Springer, Vol.22, Issue 4, pp.9469-9476, July 2019, [DoI: 10.1007/s10586-018-2365-y](https://doi.org/10.1007/s10586-018-2365-y) (ISSN: 1573-7543) IF:2.040

List of Publications in International Conferences

1. **K. Ruba Soundar** and **K. Murugesan**, “Face Recognition using Combined Global and Local Preserving Features”, IEEE International Conference on Emerging Trends in Computing (ICETiC-2009), January 2009.
2. **K. Ruba Soundar** and K.Muneeswaran, “Frequency Domain Representation of Orthogonal Wavelet Packets for Face Recognition”, International Conference on Resource Utilization & Information Security, Jan.2006.
3. **K.Ruba Soundar** and T. Anitha Devi, ”An Efficient Model for Network Intrusion Detection System based on an Evolutionary Computational Intelligence Approach”. IJCA

Proceedings on International Conference in Recent trends in Computational Methods, Communication and Controls (ICON3C 2012) Published by Foundation of Computer Science, New York, USA, April 2012.

4. **K.Ruba Soundar** and M.Dhivya, "Building Grid Based Application for the Management of Medical Image Data Using Alchemi". IJCA Proceedings on International Conference in Recent trends in Computational Methods, Communication and Controls (ICON3C 2012), Published by Foundation of Computer Science, New York, USA, April 2012.
5. **K.Ruba Soundar, et.al.**, "HBR - An Advancement in 3D Password Human Body Recognition", International Conference on Computing and Control Engineering (IC³2012), April 2012.
6. **K.Ruba Soundar** and T. Anitha Devi, "An Efficient Model for Network Intrusion Detection System based on Computational Intelligence", First International Conference on Computational Intelligence & its Applications. (ICCIA2012), March 2012.
7. **K.Ruba Soundar** and S. Muthukumar, " Measuring Denial of service Attacks using effective metrics in wireless Networks", International Conference Electrical, Electronics & Robotics (ICEER) held at Institute of Research and Journals, Chennai on 29th October,2013.
8. **K.Ruba Soundar** and S. Muthukumar, " Avoid Packet Replication attack based on Intrusion Detection and Defense Mechanism over MANET using SWARM Intelligence", International Conference Electrical, Electronics & Robotics (ICEER) held at Institute of Research and Journals, Chennai on 29th October,2013.
9. **Dr.K.Ruba Soundar** and S.Venkada Lakshmi, "Framework for Efficient Job Scheduling in Cloud Environment", International conference on Futuristic Trends in Computer Science Engineering & Information Technology, Thiruvalluvar College of Engineering Technology on 1st and 2nd March 2014.
10. **K.Ruba Soundar**, K.Rajeswari, "Video Privacy Protection using SIFT Feature", International Conference on Intelligent Engineering Systems held at EASA College of Engg. & Tech., on Apr.3rd & 4th 2014.
11. **K.Ruba Soundar**, R.Santhi, "Feature Selection Problem Recover by Rough Hypercuboid", International Conference on Innovation in Communications and Computer Engineering held at Coimbatore Institute of Technology on Feb.15, 2015.
12. **K.Ruba Soundar**, A.Meena, "Multitask Schedule using Genetic Algorithm in Cloud based Multimedia System", International Conference on Innovation in Communications and Computer Engineering held at Coimbatore Institute of Technology on Feb.15, 2015.
13. **K.Ruba Soundar**, A.Meena, "Multiservice Load Optimization using PSO Algorithm in Cloud based Multimedia System", International Conference Innovation on Advanced Technological Innovations held at Scad College of Engg. and Tech. on Apr.18, 2015.

14. K.Lekshmi and **K.Ruba Soundar**, "Automatic Segmentation of Hepatic Tumors in CT Images using Adaptive EM and Diagnostics of IR Spectroscopy", The First QIRT-ASIA Conference on Quantitative Infrared Thermography, 6-10 July, -2015, Mamallapuram.
15. Lekshmi K, **Ruba Soundar K**, et.al., (2016), "Automated selection of parameters using Tabu Search in image segmentation", 10th International Conference on Intelligent Systems and Control (ISCO) DOI : 10.1109/ISCO.2016.7726940. (EISBN : 978-1-4673-7807-9, ISBN : 978-1-4673-7808-6).
16. P.Elamparithi and **K.Ruba Soundar**, "Optimized Black Hole Attack Detection Mechanism with Reliable and Secured Routing in MANET Environment", International Conference on Innovations in Science, Technology and Management towards Sustainability held at PSR Engineering College, Sivakasi on November 10, 2017, pp.53 ISBN 978-93-86146-37-3.
17. D.Suvathi and **K.Ruba Soundar**, "Image Cloud Processing for Big Data", International Conference on Innovations in Science, Technology and Management towards Sustainability held at PSR Engineering College, Sivakasi on November 10, 2017, pp.37 ISBN 978-93-86146-37-3.
18. S.Divyalakshmi and **K.Ruba Soundar**, "Application Aware Independent Deduplication for Big Data", International Conference on Innovations in Science, Technology and Management towards Sustainability held at PSR Engineering College, Sivakasi on November 10, 2017, pp.39 ISBN 978-93-86146-37-3.
19. **K.Ruba Soundar** and D.Jeya Sankara Kuberan, "Water Resource Preservation in Agriculture using Automated Irrigation System", International Conference on Innovations in Science, Technology and Management towards Sustainability held at PSR Engineering College, Sivakasi on November 10, 2017, pp.45, ISBN 978-93-86146-37-3.
20. JeyaSankaraKuberan.D and **Ruba Soundar.K** "Mining Human Activity Patterns From Smart Home Big Data For Health Care Applications", Proceedings of the 8th National Conference on Recent Trends In Computing, Communication And Technology (Recant'18) held at PSR Engineering College, Sivakasi on 16th and 17th March 2018
21. R.Aarthi, **K.Ruba Soundar**, "Analysis of Network Attack and Mitigation of Energy Times of Wireless Nodes", Proceedings of International Conference on Recent Trends in Engineering Education held at PSR Engineering College on 05th and 06th October 2018.
22. Sivaranjani C, Lekshmi K, **Ruba Soundar K**, et.al., "Real-Time Identification of Medicinal Plants using Machine Learning Techniques", IEEE Sponsored International Conference on Computation Intelligence in Data Science (ICCIDS 2019) organized at SSN college of Engineering during 21-23, Feb.2019.
23. N. Kavitha, K. Ruba Soundar, et.al., (2019), "Intellectual Human-Object Classification Using Genetic Algorithm", 2019 Advances in Science and Engineering Technology International Conferences (ASET), DOI : 10.1109/ICASET.2019.8714202 (IEEE) (2019).