

Dr. R. Deepalakshmi, B.E., M.E., Ph.D.
 Professor/CSE
 Velammal College of Engineering and Technology, Madurai
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Educational Qualification:

| Category | Name of the Degree | Specialization | Year of Passing | Name of the College & University | % of Marks / Grades Obtained | Class Obtained |
|----------|--------------------|----------------|-----------------|--|------------------------------|----------------|
| UG | B.E | CSE | 1999 | Sethu Institute of Technology Madurai Kamaraj | 72% | FIRST |
| PG | M.E | CSE | 2006 | Arulmigu Kalasalingam College of Engineering Anna University | 89% | FISRT |
| Ph.D. | | ICT | 2014 | Anna University | - | - |

Experience in Years: 20.7 Yrs

| Name of the College | Designation | Experience | |
|--|---------------------------------|------------|--------|
| | | Years | Months |
| Velammal college of engineering and Technology | ASSISTANT PROFESSOR & PROFESSOR | 13 | 7 |
| Arulmigu Kalasalingam College of Engineering | LECTURER | 2 | - |
| SACS MAVMM Engineering College | LECTURER | 3 | 11 |
| RVS College of Engineering and Technology | LECTURER | 1 | 1 |
| Total | | 20 | 7 |

Interested Research Areas: Networks

Funded Research Works:

Title of the Project: Concentralized Solar Thermal (CST) Technology based System for Heat Applications

Role Played / Playing: Co Investigator

Name of the funding agency: MNRE

Funding Amount: Rs. 56.25 lakhs

Patent Publication:

METHOD, UTILITY AND DEVICE BASED ON INTERNET OF THINGS (IOT) FOR PANDEMIC DISEASE SURVEILLANCE AND PREDICTION, No. 202041050703

Publications Details:

1. Book Publications:

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| 1. Book Title: Introduction to Grid and Cloud Computing Publisher: Shanlax Publications Madurai, Tamil Nadu, INDIA Year: 2017 |
| 2. Book Title: Algorithms for Improving QoS in Optical Networks Publisher: Lambert Academic Publishing Year: 2018 |
| 3. Book Title: Advances in Computer Science Chapter: Artificial Intelligence and Machine Learning Publisher: AkiNik Publications Year: 2019 |
| 4. Book Title: Emerging Trends in Engineering Research and Technology Chapter : A new Algorithm for enlarging text for Individuals suffering from low vision Publisher: Book Publisher International Year: 2020 |
| 5. Book Title: Multimedia and Sensory Input for Augmented, Mixed, and Virtual Reality Chapter : Algorithm to Improve Reliability in Multimedia Data Transmission: Algorithm to Improve Reliability in Multimedia Data Transmission Publisher: IGI Global Publisher Year: 2021 |

2. International/National Journal Publication Details:

INTERNATIONAL / NATIONAL JOURNAL

1. Dr. R. Deepalakshmi "Crossover-Based Improved Sine Cosine Algorithm for Multimedia Content Distribution in Cloud Environment"- Journal of Circuits, Systems and Computers, Received 5 December 2019, Accepted 3 May 2020, Published: 17 September 2020.
2. Dr. R. Deepalakshmi "Hands Free Assistant For Hands-On Workersision"- Journal of Technology, ISSN No: 1012-3407, Volume: 35, Issue: 03, August 2020.
3. Dr. R. Deepalakshmi "New SMS based Anti- theft security system for two-wheelers using GSM and GPS"- International Journal of Innovative research, Volume 8 Issue 8 August 2020.
4. Dr. R. Deepalakshmi "Enlarging Text for Individuals suffering from low vision"- International Journal of innovative Technology and Exploring Engineering Volume 9, Issue 2, Pg No. 3666- 3670, December 2019.
5. Dr. R. Deepalakshmi , " Global CSR-A Platform that Connects the Society with the Corporates"- International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-6S, April 2019. <https://www.ijtee.org/wp-content/uploads/papers/v8i6s/F60620486S19.pdf>

6. Dr. R. Deepalakshmi , " Improved Home Automation System based on GSM " - international journal of advanced information and communication technology , March 2018,Vol:4(11),Pg.no: 1312-1317,ISSN: 2348-9928
7. Dr. R. Deepalakshmi , " Smart glass implementation using Machine Learning for Visually challenged " - Journal Of Scientific And Industrial Research, 2018,Pg.no:1-14 ,ISSN: 0975-1084.
8. Dr. R. Deepalakshmi , "A new approach for Dynamic Price Prediction of vegetable commodities using statistical price prediction (SPP) Techniques"- Journal of Engineering and Applied Sciences,2017
9. Dr. R. Deepalakshmi ,B. Vani, "Test Suite Generation of t- way CIT with constraints for Web Based Application" International Journal of Computer Science and Information Technologies, Vol. 7 (4) , 2016, Page Number(s).
10. Dr. R. Deepalakshmi & X.Anexshe Revedha, 'EEG Based Wheelchair Navigation for Paralysis Patients ' , International Journal of Electronics, Electrical and Computational System, ISSN 2348-117X, Volume 4, Issue 12, Pages 1-4,2015.
11. Dr. R. Deepalakshmi & B.Vani , 'Incremental Generation and Prioritization of t-way Strategy for Web Based Application ' ,International Journal of Engineering and Technology, ISSN : 0975-4024, Volume 7, Number 2, Pages 620-630, 2015. <http://www.ripublication.com/Volume/ijaerv10n31spl.htm>
12. Dr. R. Deepalakshmi & B.Vani , 'Test Suite Prioritization by t-way CIT and Hybrid Evaluation Metric for Web Based Application ' ,International Journal of Applied Engineering Research, ISSN 0973-4562, Volume 10, Number 31, Pages 23080- 23087, 2015. <http://www.ripublication.com/Volume/ijaerv10n31spl.htm>
13. Dr. R. Deepalakshmi & B.Vani , 'Developing Prioritization Criteria and Determining FDD of t-way Combinatorial Interaction Test for Web Based Application ' , Discovery ANALYSIS-The International Daily journal, ISSN 2278 – 5469, Volume 30, Number 123, Pages 132-138, 2015.<http://www.discovery.org.in/d/H30123.htm>.
14. Dr. R. Deepalakshmi & B.Vani , 'A Chronological Survey on Combinatorial Testing Strategies ' , Advances in Natural and Applied Sciences, Volume 8 , Number 16, Pages: 25-32, Special 2014.http://www.aensiweb.com/old/anas_special4-EEICC_2014.html.
15. R. Deepalakshmi & S.Rajaram, 'Effective heuristic algorithm for dynamic routing and bandwidth management under QoS constraints in multistage interconnection networks', American Journal of Applied Sciences, Volume 11, Number 3, Pages 414-424,2014.<http://thescipub.com/PDF/ajassp.2014.414.424.pdf>
16. R. Deepalakshmi & S.Rajaram, 'Performance study of dynamic provisioning and restoration algorithm- (DCOPA) for optical networks with promising QoS', Australian

17. R. Deepalakshmi & S. Rajaram, 'A novel scheduling algorithm for real time traffic using hashing technique in optical networks', Wulfenia Journal, Volume 20, Number 5, Pages: 205-220.
18. R. Deepalakshmi & S. Rajaram, 'New enhanced performance MAC routing algorithm to improve reliability in multimedia data transmission based on mutual diversity for optical networks', International Journal of Computer Science and Network Security, Volume 13, Number 1, Pages: 133-140. http://paper.ijcsns.org/07_book/201301/20130121.pdf
19. R. Deepalakshmi & B. Vani, 'Web Based Testing – An Optimal Solution To Handle Peak Load', International Journal on Computational Intelligence and Informatics (IJCII), Volume 7, Number 6, Pages: ,2013. <http://ijcsi.org/papers/IJCSI-Vol-7-Issue-6.pdf>.
20. R. Deepalakshmi, S. Suriya & SP. Shantharajah, 'Enhanced Bee Colony Algorithm for Complex Optimization Problems', International Journal on Computer Science and Engineering, Volume 4, Number 1, Pages: 72-78, 2012.
21. www.enggjournals.com/ijcse/doc/IJCSE12-04-01-004.pdf.
22. R. Deepalakshmi, S. Suriya, 'A Complete Survey On Association Rule Mining With Relevance To Different Domain', International Journal of Advanced Scientific and Technical Research, Volume 1, Number 1, Pages: 163-168, 2012. http://www.researchgate.net/publication/265241649_A_Complete_Survey_on_Association_Rule_Mining_with_Relevance_to_Different_Domain
23. R. Deepalakshmi & S. Rajaram, 'New Enhanced Performance MAC Routing Algorithm to Improve Reliability in Multimedia Data Transmission based on Mutual Diversity', European Journal of Scientific Research, Volume 72, Number 2, Pages: 285-297, 2012. http://paper.ijcsns.org/07_book/201301/20130121.pdf
24. R. Deepalakshmi & S. Rajaram, 'Design of New MAC Routing Algorithm based on Mutual Diversity for Optical Networks to Improve Reliability in Multimedia Data Transmission', International Journal of Emerging Trends in Engineering and Development, Volume 2, Number 2, Pages: 67-81, 2012. http://paper.ijcsns.org/07_book/201301/20130121.pdf
25. R. Deepalakshmi, S. Suriya, 'Mining Frequent Items using Compressed Data Structures', International Journal of Advanced and Innovative Research, Page: 305-309, 2012. <http://ijair.jctjournals.com/dec2012/t121206.pdf>
26. R. Deepalakshmi & S. Rajaram, 'A New Algorithm to Route Multimedia Traffic in Optical Networks with Improved Call Blocking Characteristics', International Journal of Multimedia and Ubiquitous Engineering, Volume 6, Number 2, Pages: 1-12, 2011. http://www.sersc.org/journals/IJMUE/vol6_no2_2011/1.pdf

27. R. Deepalakshmi&S. Rajaram, ‘ A Novel Medium Access Control (MAC) Protocol for Multimedia Traffic Routing in Optical Networks by Exploiting Delays in Dynamic Bandwidth Allocation’ , Journal of High Speed Networks, Pages :772-778,2011
28. R. Deepalakshmi&S. Rajaram, ‘ A Novel Medium Access Control Protocol for Routing Multimedia Traffic in Optical Networks by exploiting Delays with improved Dynamic Bandwidth Allocation’, Journal of Systems and Software, Volume 1, Number 7, Pages:229-235,2011.
29. R. Deepalakshmi&S. Rajaram, ‘ Optimized Routing Algorithm- (ORA) for Optical Networks with less rejection Ratio’ , Journal of Advanced Research in Computer Engineering, 2010.
30. R. Deepalakshmi&S. Rajaram, ‘ An Effective Cost Optimized Provisioning Algorithm-(ECOPA) for Optical Networks’, CiiT International Journal of Networking and Communication Engineering, Volume 2, Number 8,Pages:256-259,2010.<http://www.ciiresearch.org/dl/index.php/nce/article/view/NCE082010007>

3. International/National Conference Presentation Details:

1. Dr. R. Deepalakshmi , "A new approach for Dynamic Price Prediction of vegetable commodities using statistical price prediction (SPP) Techniques"- 6th International Conference on Communications, Electrical, Electronics and Computer Engineering (ICEEC 2017),Pune, India, August 5, 2017.
2. Dr. R. Deepalakshmi , “Voice Based Mail Attachment System for IAB-(Indian Association for Blind)”, National Conference on Recent advances in Computer Science 2017, Sri Krishna College of Engineering and Technology, 31st March 2017.
3. Dr. R. Deepalakshmi , “New Mechanism for Public Auditing in Cloud Computing for Shared Data”, International Conference on Advances in Engineering and Technology, April 8,2017. ISBN-13: 978-1545227169.
4. Dr. R. Deepalakshmi and Sathiya vadivoo, “A Detailed survey on Data Analytic Tools for efficient Predictive and Descriptive Analysis of Data” in National Conference on Research Advances in Smart Computing and Communication Systems at University College of Engineering (A constituent college of Anna University , Chennai) on 15th March 2017.
5. Dr. R. Deepalakshmi and Sathiya vadivoo, “A new framework for big data analytics to predict the price of vegetable commodities”, ISRO sponsored Indian conference on Data analytics, Big data, Data mining and Data Science at K.L.N college of Information technology on October 27th and 28th 2016.
6. Dr. R. Deepalakshmi and Sathiya vadivoo, “ An Enterprise Framework To Foretell The Rate Of Vegetable Commodities Using Big Data” in International Conference on Computation, Communication and Innovation at Alagappa chettiar college of Engineering and Technology on October 5th and 6th 2016.
7. Dr. R. Deepalakshmi and B.Vani , “Test Suite Prioritization by t-way CIT and Hybrid Evaluation Metric for Web Based Application”, of International Conference on Hi-Tech Trends in Emerging Computational Technologies-ICECT 2015 2015,(Sethu Institute of Technology, Virudhunagar, 02/04/2015 - 03/04/2015.

8. Dr. R. Deepalakshmi and B.Vani , “Developing Prioritization Criteria and Determining FDD of t-way Combinatorial Interaction Test for Web Based Application”, of International Conference on Recent Innovations in Engineering & Technology –2015 ICRIET 2015,(Mahabarathi Engineering College, Villupuram , 13-14 February 2015.
9. Dr. R. Deepalakshmi and B.Vani , “A Chronological Survey on Combinatorial Testing Strategies”, Proceedings of the International Conference on Electrical Electronics Instrumentation and Computer Communication (E²IC²) , Karpagam College of Engineering, 12th and 13th December 2014 .
10. Mrs. R. Deepalakshmi and B.Vani, ‘Web based testing — An optimal solution to handle peak load’, IEEE International Conference on Pattern Recognition, Informatics and Mobile Engineering (PRIME), February 21-22, 2013.
11. Mrs. R. Deepalakshmi and AbinayaDeepika.R, ‘Designing an Opportunistic Routing Scheme for Adaptive Clustering Mobile Ad-Hoc Networks ‘, 4th National Conference on Research Issues in Computer Science & Engineering at RMK Engineering College, Chennai ,1st &2nd March 2013.
12. Mrs. R. Deepalakshmi and Pathirakali, ‘Network Fault Localization With Monitoring Based Probing Technique’, National Conference on Information and Communication Engineering at Velammal College of Engineering and Technology, Madurai. 15th & 16th March 2013.
13. Mrs. R. Deepalakshmi and AbinayaDeepika.R , ‘An Inventive Steering Algorithm to Enhance the Network Lifetime in Mobile Ad-Hoc Network’, National Conference on Recent Trends in Information Technology and Communication at Velammal Engineering College, Chennai,5th April 2013.
14. Mrs. R. Deepalakshmi and AbinayaDeepika.R , ‘A New Scheme for QoS Model Scheduling Algorithm in Differentiated Service Based on Real Time Traffic’, National Conference on Recent Trends in Information Technology and Communication at Velammal Engineering College, Chennai,5th April 2013.
15. Mrs. R. Deepalakshmi and B.Vani, ‘ High Accuracy Optical Character Recognition Algorithms Using Learning Array of Artificial Neural Networks’, International Conference on Computational Intelligence ICCI 2013 at Sethu Institute of Technology,25th & 26th April 2013.
16. Mrs. Deepalakshmi R, VinuBharathi V and Tamil PrabhaN ,’A Comprehensive Survey on Maintenance of Provenance Data’, National Conference on Intelligent Computing (NCIC 2013) at PSG College of Technology, Coimbatore,26 - 27, April, 2013.
17. Mrs. R. Deepalakshmi and S. Suriya ,’ Modified Bee Colony Algorithm for Optimization Problems’, National Conference On Applications of Mathematics And Computer Science (NCAMCS),February 10, 2012.
18. Mrs. R. Deepalakshmi and Dr. S. Rajaram , ‘A Cooperative Diversity-based Robust MAC Protocol in Wireless Ad Hoc Networks’ , Second National Conference On Recent Trends In Communication, Computation And Security,9th March 2012.
19. Mrs. Deepalakshmi R, VinuBharathi V and Tamil Prabha N , ‘Higher Data Security using Hybrid Cryptographic algorithms’, 3rd National conference on Issues and Trends in Advanced Computing (NITAC-2012),17-18, March 2012.

20. Mrs. R. Deepalakshmi and Abinaya Deepika. R , 'A New Robust Medium Access Control Protocol for Wireless Adhoc Networks', National Conference on Computer Science and Informatics at Anna University of Technology Madurai 23- 24th April 2012.
21. Mrs. R. Deepalakshmi and S. Suriya , 'Association Rule Mining Using WEKA', National Conference on Envisioning Innovation in Technologies, 11August 2012.
22. Mrs. R. Deepalakshmi, 'Enhanced Performance of Video Streaming over Multi hop Wireless local Area Networks', National Conference on Signal Processing and Communication technologies, 26March 2011.
23. Mrs. R. Deepalakshmi and Dr. S.Rajaram, 'New MAC Protocol for Multimedia Traffic Routing in Optical Network', IEEE Conference on Computer Applications and Industrial Electronics, December 2011.
24. Mrs. R. Deepalakshmi, 'Dynamic Key management to minimize Communication Latency for efficient group Communication', International Conference on Computer, Communication and Intelligence, 22-23July 2010.
25. Mrs. R. Deepalakshmi and Dr. S. Rajaram, 'Multimedia Traffic Routing Algorithm for Optical Networks with Enhanced Performance Characteristics', IEEE International Conference on Internet Multimedia Systems Architecture and Application, 15-17 December 2010.
26. Mrs. R. Deepalakshmi and Dr. S. Rajaram, 'A Dynamic Cost Optimized Provisioning Algorithm- (DCOPA) for Optical Networks with less Rejection Ratio', IEEE International Conference on Communication and Computational Intelligence (INCOCCI 2010), 27-28 December 2010.
27. Virtual Private Network Cost Optimized provisioning Algorithm through Link Multiplexing International Conference on Emerging Trend in Computing-ICETIC-2009, 8-10January 2009.
28. A Study of various PON Technologies ,National Conference on Information, Communication and Electrical Engineering , 27-28February 2009.
29. PON technologies for Dynamic optical Access Networks, National Conference on Information, Communication and Electrical Engineering, 27-28February 2009.
30. A Paradigm Shift in Professional Education, ISTE-Annual Convention, 27September 2008.
31. Virtual Private Network Cost Optimized provisioning, National Conference, 28December 2007.
32. Host Protocol for VPN Networks, National Conference on Computing and Applications- NACCA '06, 24February 2006.
33. COVPA-Cost optimized VPN provision Algorithm, National Conference on Innovation in Information and Communication Technologies, 7-8July 2006.