

## **Dr. A. Murugan**

Associate Professor & Head  
PG & Research Department of  
Computer Science  
Dr. Ambedkar Govt. Arts College,  
Vyasarpadi,  
Chennai – 600 039.  
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### **PERSONAL INFORMATION**

Father's Name	:	S. Annamalai
Date of Birth	:	09-03-1972
Languages Known	:	Tamil, English
Permanent Address	:	No 5/84-A, Poolangulam & (P O) Kadayam (Via) Tirunelveli 627 415.

### **TEACHING EXPERIENCE**

*From Oct'2012 to till date*  
**(Government Service)**

College	:	Dr Ambedkar Govt. Arts College, Vyasarpadi, Chennai – 600 039.
Post Held	:	Associate Professor of Computer Science
Nature of Job	:	Teaching

*From July'2000 to Oct '2012*  
**(Government Service)**

College	:	Dr Ambedkar Govt. Arts College, Vyasarpadi, Chennai – 600 039.
Post Held	:	Assistant Professor of Computer Science
Nature of Job	:	Teaching.

*From Oct'98 to June'2000*  
**(Government Service)**

College	:	Thiru A.G. Govt. Arts College, Tindivanam.
Post Held	:	Lecturer in Computer Science (PG)
Nature of Job	:	Teaching

*From Oct' 94 to Oct' 98*

College	:	Jaya College of Arts & Science, Thiruninravur.
Post Held	:	Lecturer in Computer Science and Head of the Department (UG)

Nature of Job : Teaching, Department Administration.

### **AREA OF SPECILIZATION**

Molecular Computation, Graph Theory, Data Structure, Analysis of Algorithms and Theoretical Computer Science.

### **RESEARCH SUPERVISOR**

#### **Ph.D**

Recognized Ph.D research supervisor in Bharathiar University, Kuppam University, Manonmaniam Sundaranar University, Mother Teresa University and University of Madras.

Number of students completed: 10

Number of students under guidance: 07

#### **M.Phil**

Recognized guide for University of Madras, Bharathidasan University, Periyar University, Annamalai University and Mother Teresa University.

Number of students completed: 19

### **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.
- Journal of Computer Science – Science Publications

#### **Technical Advisory/Programme Committee Member**

- International Conference on Soft Computing and Optimizing Techniques (ICSO '19) Organized by PG & Research Department of Computer Science, Kamaraj College, Thoothukudi, Tamil Nadu on 9<sup>th</sup> & 10<sup>th</sup> Aug' 2019.
- 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 Seminar on Recent Trends in Computer Science Organized by Department of Computer Science and Applications Annai Violet College of Arts and Science, Chennai with ICTACT on 13<sup>th</sup> February 2015.
- National Conference on Information and Communication Technology (NCICT '15) Organized by Sri Muthukumaran Arts and Science College, Chennai, India on 7<sup>th</sup> February 2015.
- Second International Conference on Communication & Computing & Information Technology Organized 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 Organized by M.O.P Vaishnav College for Women, Chennai, India on 21<sup>th</sup> & 22<sup>th</sup> Dec 2012.

### **Session Chair**

- International Conference on Soft Computing and Optimizing Techniques (ICSO '19) Organized by PG & Research Department of Computer Science, Kamaraj College, Thoothukudi, Tamil Nadu on 9<sup>th</sup> & 10<sup>th</sup> Aug' 2019.
- Second International Conference on Communication & Computing & Information Technology Organized 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 Organized by M.O.P Vaishnav College for Women, Chennai, India on 21<sup>th</sup> & 22<sup>th</sup> Dec 2012.
- National Conference On Applications of Mathematics and Computer Science (NCAMCS 2012) Organized by Department of Mathematics & Department of Computer Science, S.D.N.B. Vaishnav College for Women Chromepet, (Autonomous), Chennai, India on 10<sup>th</sup> February 2012.

### **Reviewer**

- 7th International Symposium on Language & Knowledge Engineering (LKE 2019), **Technological University Dublin, Ireland Oct 29-31;2019.**
- 6th International Symposium on Language & Knowledge Engineering, (LKE 2018), Mexico, October 29th to 31st, 2018
- 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.
- WCC Centenary International Conference on Mathematical and Natural Sciences Organized by Women's Christian College, Chennai, India on 7<sup>th</sup>, 8<sup>th</sup> & 9<sup>th</sup> January 2016.
- Third International Conference on Mining Intelligence and Knowledge Exploration (MIKE 2015) Organized by International Institute of Information Technology (IIIT), Hyderabad, India on December 09-11, 2015.
- 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 Current Trends in Information Technology(NCCTIT 2015) organized by PG department of Information Technology, Kumararani Meena Muthiah College Adyar Chennai, India on 20th February
- Second International Conference on Mining Intelligence and Knowledge Exploration (MIKE 2014) Organized by University College Cork (UCC), National University of Ireland, Cork, Ireland on December 10-12, 2014.
- 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 Mining Intelligence and Knowledge Exploration (MIKE 2013) Organized by VHNSN College, Virudhunagar, Tamil Nadu on 18-20 December 2013.
- 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.

- National Conference On Applications of Mathematics and Computer Science (NCAMCS 2012) Organized by Department of Mathematics & Department of Computer Science, S.D.N.B. Vaishnav College for Women Chromepet, (Autonomous), Chennai, India on 10<sup>th</sup> February 2012.

### **AUTHOR OF 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 Sunitha, *Client/ Server Computing*, Margham Publications, 2016, ISBN No: 978-93-83242-35-1.

### **RESOURCE PERSON**

1. Lecture on “DNA Computing”, Queen Mary’s College, Chennai on 02-02-2006.
2. Lecture on “DNA Computing and its Applications”, **UGC sponsored National seminar on “Recent Developments in Computer Technology”**, AVC College, Myladuthurai, 16-02-2012.
3. Lecture on “DNA Computing”, **International conference** on Pervasive systems and Internet computing (IC-PSIC), Loyola College, Chennai, July 2012.
4. Acted as a resource person in ASC, University of Madras on 12-11-2014.
5. Acted as a resource person in ASC, University of Madras on 14-11-2019

### **BOARD OF STUDIES MEMBER**

1. Women’s Christian College, Chennai (University Nominee) – UG – Computer Science – Feb ‘2006 to Jan ‘2008.
2. D. B Jain College, Chennai (University Nominee) – MCA & M.Sc (IT) – Aug ‘2006 to July ‘2008.
3. Mother Teresa University – MCA.
4. Quaid-E-Millath Govt. College for Women, Chennai (University Nominee) – UG – Sep ‘2006 to Aug ‘2008.
5. Chairman, Board of Studies (UG), University of Madras – June ‘2009 to May ‘2012.
6. D. B Jain College, Chennai (Subject Expert) – B.Sc (Bio Informatics) – 2010 to 2012.
7. D. B Jain College, Chennai (Subject Expert) – B.Com (Computer Applications) – 2010 to 2012.
8. Chairman, Question paper setting (B.Sc Comp.Sci) and B.Sc (Software Computer Science) - Thiruvallur University – April 2011 to April 2014.
9. Queen Mary’s College - University Nominee –BCA– July ‘2015 to July ‘2017.
10. Guru Nanak College, Chennai - University Nominee – B.Sc Computer Science and MCA– Sep ‘2015 to Sep ‘2017.

### **DOCTORAL COMMITTEE MEMBER**

Doctoral Committee Member in University of Madras, Bharathiar University, Bharath University, SRM University and Vels University

## VIVA VOCE EXAMINER

Served as Ph.D Viva-Voce Examiner in University of Madras, Bharathiar University, Bharath University, and Vels University

## PUBLICATIONS

### *International Journal and Conference Publications*

1. **A. Murugan** and K.S. Easwarakumar. *Transposition based contextual insertion on linear DNA strands with deletion precedence*, International Journal of Computer Mathematics. Vol. 81(6), Pages 647-660, 2004.
2. K.S. Easwarakumar and **A. Murugan**. *Possibilities of Constructing Two dimensional picture in DNA Computing - Part-I*. International Journal of Computer Mathematics. Vol. 82(11), Pages 1307-1321, Nov 2005.
3. **A. Murugan** and K.S. Easwarakumar. *Possibilities of Constructing Two dimensional picture in DNA Computing - Part-II*. International Journal of Computer Mathematics. Vol. 83(1), Pages 1-20, Jan 2006.
4. **A. Murugan** and K.S. Easwarakumar. *DNA Algorithms for Fractal Construction – An application of SInsDelP System*. International Journal of Computer Mathematics. Vol. 84(4), Pages 437-450, April 2007.
5. P. J Arul Leena Rose and **A. Murugan**. *Prevention of noises in Mobile communication*. In Proceedings of the Third International Conference on Information and Advanced Computing, P 58-73, Bharath University, Chennai, India, July 2008.
6. G.Savithiri and **A. Murugan** *Performance Analysis of Irish Recognition Algorithms*. In Proceedings of the International Conference on “Millennium Development Goals (MDG). P 295-299. RMK and RMD Engineering Colleges. Chennai, December 2009.
7. G.Savithiri and **A. Murugan** *Iris Recognition Technique using Gaussian Pyramid Compression*. In: Das V.V. et al. (eds) Information Processing and Management. Communications in Computer and Information Science. **Springer**, Berlin, Heidelberg, ISBN: 978-3-642-12213-2, Vol. 70: P 325-331. April 2010.
8. G.Savithiri and **A. Murugan** *Iris Recognition Using Gaussian Pyramid Compression and Modified Distance Measures*. Journal of Computational Intelligence and Bioinformatics. Vol 3(1) Pages 101 – 110, 2010
9. **A. Murugan** and B.Lavanya. *A DNA Algorithmic approach to solve GCS Problem*. Journal of Computational Intelligence and Bioinformatics. 3(2):P239-247, 2010.
10. **A. Murugan** and G. Savithiri. *Feature Extraction on Half Iris for Personal Identification*. In Proc. of IEEE International Conference on Signal and Image Processing (ICSIP), pp 197-200, Dec 2010.
11. **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.

12. Grasha Jacob and **A. Murugan**, *DNA Computing : Challenges and Applications* RAC Journal of Research 1 (2), 5-9, Feb 2011 ISSN: 2230-7362.
13. G.Savithiri and **A. Murugan** *Performance Analysis on Half Iris Feature Extraction using GW, LBP and HOG*. International Journal of Computer Applications. 22(2):P27–32, May 2011.
14. B.Lavanya and **A. Murugan** *A DNA based approach to find closed repetitive gapped subsequences from a sequence Database-* International Journal of Computer Applications. Volume 29(5), September 2011.
15. B.Lavanya and **A. Murugan** *Discovering sequence motifs of different patterns parallelly using DNA operations-* International Journal of Computer Applications. Volume 33(1), November 2011.
16. **A. Murugan** and G Savithiri. *Fragmented Iris Recognition System using BPNN*. International Journal of Computer Applications 36(4):28-33, December 2011.
17. B.Lavanya and **A. Murugan** *Mining Longest Common Subsequence and other related patterns using DNA Operations*, International Journal of Computer Applications, Vol-49, (18), 38-44, 2012.
18. T. Sridevi, and **A. Murugan**, *Rough set theory based attribute reduction for breast cancer diagnosis*. Indian Journal of Innovations and Developments, 1(5), 309-313. 2012.
19. S. Meenakshi and **A. Murugan** *e-Governance: Modernised e-Democratization in India through e-Voting*, In Proceeding of First International Conference on Communication, Computing and Information Technology, 21st and 22nd December 2012, M.O.P Vaishnav College for Women, Chennai, ISBN: 978-81-906851-4-6, pp: 59-60.
20. Grasha Jacob and **A. Murugan** *A Hybrid Encryption Scheme using DNA Technology*, The International Journal of Computer Science and Communications Security (IJSCS), Volume 3 (2), 61-65, February 2013. ISSN: PP17467/07/2012 (030321)
21. Grasha Jacob and **A. Murugan** *DNA based Cryptography: An Overview and Analysis*, International Journal of Emerging Sciences (IJES) ISSN: 2222-4254, Volume 3(1), 36-42, March 2013.
22. S. Meenakshi and **A. Murugan**, *Service-Oriented Grid Computing for Effective e-Governance*, International Conference on Emerging Trends and Challenges in Science and Technology, 1st and 2nd March, 2013, Bhaktavatsalam Memorial College for Women, Chennai – 80.
23. B.Lavanya and **A. Murugan** *Discovery of Longest Increasing Subsequences and its Variants Using DNA Operations*, International Journal of Engineering and Technology (IJET), ISSN : 0975-4024, Vol 5 (2) 1169-1177, May 2013, **SCOPUS Indexed**.
24. Grasha Jacob and **A. Murugan**, *An Encryption Scheme with DNA Technology and JPEG Zigzag Coding for Secure Transmission of Images*, arXiv preprint arXiv:1305.1270, May 2013.
25. T. Sridevia and **A. Murugan**. *An Expert System To Detect Malignant Cells In Breast Cancer*. International Journal of Engineering Research and Applications , Vol. 3, Issue 3, pp.772-776, May 2013.

26. B.Lavanya and **A. Murugan** *Multidimensional Longest Common Subsequence discovery from Large Databases Using DNA Operations*, International Journal of Engineering and Technology (IJET), ISSN: 0975-4024, Vol 5 (2) 1153-1160, May 2013, **SCOPUS Indexed**.
27. T. Sridevi and **A. Murugan**. *Feature selection based on rough set theory and K-Mean clustering*, In Proceeding of the International conference on Research Trends in Computer Science, Sri Kanyaka Parameswari Arts and Science College for Women, Chennai, P 67-79. Aug 2013.
28. P.J. Arul Leena Rose and **A. Murugan** *Noise Elimination and Performance Measure for fingerprint using Median Filter*, International Journal of Scientific and Engineering Research (IJSER) - (ISSN 2229-5518). Volume 4 (9) 1348- 1359, September 2013.
29. P.J. Arul Leena Rose and **A. Murugan** *Noisy Fingerprint Enhancement Technique for Spatial Domain Methods a Similarity Study*, International Journal of Computer Science and Technology (IJCTST) - (ISSN 2229-4333). Volume 4 (4) 254-258, Oct 2013.
30. T Sridevi and **A Murugan** *An Intelligent Classifier for Breast Cancer Diagnosis based on K-Means Clustering and Rough Set*, International Journal of Computer Applications (IJCA) (ISBN : 973-93-80879-71-6) Vol. 85(11), PP 38-42, January 2014.
31. **A. Murugan** and Grasha Jacob, *On the Secure Storage and Transmission of Health Care Records Based on DNA Sequence*. In Proceedings of IEEE conference ICAC., <http://dl.acm.org/citation.cfm?id=2624350> Bharathiar University, Jan 2014  
**DOI: [10.1109/ICICA.2014.33](https://doi.org/10.1109/ICICA.2014.33)**
32. **A. Murugan** and Grasha Jacob, *Towards the Secure Storage of Images on Multi-Cloud System* © Elsevier Proceedings, PP 58-62, Jan 2014.
33. S. Meenakshi and **A.Murugan**, *Enhancing Rural Development in Tamil nadu through ICT: An Evaluation of Latest Technologies in the scheme MGNREGS*”, International Journal of Computer Trends and Technology (IJCTT), ISSN 2231 2803, Vol. 7(2), PP119-127, Jan 2014.
34. T Sridevi and **A Murugan**, *A Novel Feature Selection Method for Effective Breast Cancer Diagnosis and Prognosis*, International Journal of Computer Applications (ISBN : 973-93-80879-71-6) Vol 88(11):28-33, February 2014.
35. Grasha Jacob **A. Murugan**, *Secure Storage and Transmission of Images Based on a Dual Encryption Scheme*, ARPN Journal of Engineering and Applied Sciences, (ISSN 1819-6608), Vol. 9(11), PP 2229 – 2233, Nov ‘2014 **SCOPUS** indexed.
36. S. Meenakshi and **A. Murugan** *Elections and Democracy: Remote E-voting as a measure to modernize the Voting process*, International Journal Of Innovative Science And Applied Engineering Research (IJISAER)” ISSN: 2349-9389 Vol. 13(39) Ver. I (Sep. 2014)
37. T. Sridevi K. Shyamala and **A. Murugan**. *An innovative algorithm for feature selection based on rough set with fuzzy c-means clustering*. Journal of Theoretical and Applied Information Technology, Vol. 68(3), pp 514-522, Oct ‘2014 **SCOPUS Indexed**.

38. Grasha Jacob and **A. Murugan**, *Generation of a Key-Dependent Dynamic S-Box*, In Proceedings of the International symposium on RIFQIHE, Bharathiar University - Oct 2014.
39. P.Swarnambigai and **A. Murugan**, *An efficient algorithm to computer all pairs shortest path using DNA sequence*, International Journal of Advanced Computer Technology (IJACT), ISSN 2319 7900, Vol 4(1), PP1-4, Feb 2015.
40. Meenakshi and **A. Murugan**, *Interactive E-Governance: Application of ICT in Agriculture with special reference to DACNET*, International Journal of Research in Computer Application and Management”, Vol 5(4), PP 15-17, April 2015.
41. **A. Murugan** and P.J. Arul Leena Rose, *Fingerprint Matching Algorithm Using Gabor, Median And Anisotropic Filters*, International Journal of Applied Engineering Research ISSN 0973-4562, Vol. 10(9), PP 23333-23343, 2015 **SCOPUS Indexed**.
42. Meenakshi and **A. Murugan**, *ICT Applications in Healthcare Sector in Tamil Nadu: Implementation and Benefits of PICME and MRMBs*, The International Journal of Applied Engineering Research, Vol. 10 (15), PP 35954-35958, Sep 2015. **SCOPUS Indexed**.
43. P. Prema and **A. Murugan**, *Intelligent traffic light control using wireless sensor networks with prioritize emergency vehicles*, International Journal of Engineering Sciences and Management Research, ISSN 2349-6193, Vol. 2(9), PP 63-67, Sep 2015.
44. **A. Murugan** and P.J. Arul Leena, *Fingerprint Matching through back propagation Algorithm*, In Proceedings of the International Conference in Recent Trends in Computing Technology” (ICRTCT - 2016), University of Madras, Chennai, 22& 23 Feb’ 2016.
45. R. Thilagavathy and **A. Murugan**, *Cloud Computing: A Survey on Security issues and DNA, ID-base Cryptography*, Indian Journal of Science and Technology, Vol 9(28), PP 1-6, ISSN (Print) : 0974-6846 , July 2016. **SCOPUS Indexed**.
46. C.P. Mathiyazhagan and **A. Murugan**, *Dynamic Forest Fire Detection Using Wireless Sensor Network*, International Journal of Current Trends in Engineering and Research, Vol 2(8), Pages 64-69, Aug ‘2016.
47. Meenakshi and **A. Murugan**, *E-Governance in Elections: Implementation of Efficient Decision Tree Algorithm to predict percentage of e-voting*, International Journal of Computer Science and Engineering, ISSN 2348-8387, Vol. 3(10), pp 31-37, October 2016.
48. J Vijayalakshmi and **A. Murugan**, *Crypto Coins: The Future of Transactions*, In Proceedings of the 3<sup>rd</sup> International Conference on Communication, Computing and Information Technology, M.O.P Vaishnav College for Women, Chennai 3<sup>rd</sup> & 4<sup>th</sup> February 2017.
49. Ganesan Senthilvel and **A. Murugan**, *Top-k Equities Pricing Search in the Large Historical data set of NYSE*, International Journal of Computational Intelligence Research, ISSN 0973-1873, Vol. 13(2), Pages. 161-173, 2017.
50. R. Thilagavathy and **A. Murugan**, *Secure the Cloud Data Transmission using an Improved RSA Algorithm*, Indian Journal of Science and Technology, Vol. 10(12), PP 1-6, ISSN (Print) : 0974-6846 , March 2017



51. U.Udayakumar and **A. Murugan**, *An Efficient Algorithm For Solving Longest Common Subsequence Problem*, International Journal of Engineering Sciences and Management Research, ISSN 2349-6193, Vol. 2(9), PP1-7, May 2017.
52. **A. Murugan** and R. Thilagavathy *Securing Cloud Data Using Dna And Morse Code: A Triple Encryption Scheme*, International Journal of Control Theory and Applications, ISSN : 0974-5572, Vol. 10(3), PP 31-38, 2017.
53. **A. Murugan** and U. Udayakumar, *Sequence Similarity between Genetic Codes using Improved Longest Common Subsequence Algorithm*, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, Vol. 5(7), PP: 57 – 60, July 2017.
54. J. Vijayalakshmi and **A. Murugan**, *Crypto Coin- Overview of Basic Transaction*, International Journal of Applied Research on Information Technology and Computing, ISSN: 0975-8070, Vol. 08 (2), PP113-120, Aug 2017.
55. **A. Murugan** and R. Thilagavathy, *Cloud Storage Security Scheme using DNA Computing with Morse Code and Zigzag Pattern*, In Proceedings of IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), pp. 2263-2268, Saveetha Engineering College, Chennai , 21<sup>st</sup> and 22<sup>nd</sup> September 2017, IEEE-CATALOG NUMBER: 978-1-5386-0814-5, doi: 10.1109/ICPCSI.2017.8392120
56. **A. Murugan** and P.Sudha, *Detection of Forest Fire using Dezert-Smarandache Theory in Wireless Sensor Networks*, In Proceedings of IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), pp. 2274-2079 , Saveetha Engineering College, Chennai , 21<sup>st</sup> and 22<sup>nd</sup> September 2017, IEEE-CATALOG NUMBER: 978-1-5386-0814-5. doi: 10.1109/ICPCSI.2017.8392122
57. P. Sudha and **A. Murugan**, *Proportional Conflict Redistribution Rule in Forest Fire Detection using Wireless Sensor Networks*, In Proceedings of IEEE International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC-2018), Priyadarshini Engineering college, Vellore, 28<sup>th</sup> and 29<sup>th</sup> January 2018, Inclusion in **IEEE Xplore Digital Library**.
58. Ganesan S and **A. Murugan**, *Meta Data Driven Enterprise Data Hub – Big data solution for Master Data Management*, In Proceedings of IEEE International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC-2018), Priyadarshini Engineering college, Vellore, 28<sup>th</sup> and 29<sup>th</sup> January 2018, Inclusion in **IEEE Xplore Digital Library**.
59. **A. Murugan** and Ganesan S, *Meta data driven big data analytics big data solution for data mining and warehousing*, In Proceeding of International Conference on Emerging Trends in Commerce, Management, Economics, Computer Science and Microbiology (**ICETCMECM 2018**), 158(Abstract) Tagore College of Arts and Science, Chrompet, Chennai on February 2, 2018.
60. P. Sudha, and **A. Murugan**, “*Forest Fire Detection using Proportional Conflict Redistribution Rule2*”, International Journal of Applied Engineering Research, ISBN 09734562, Vol. 13(6), pp. 4326-4332, 2018.
61. P. Sudha and **A. Murugan** “*Assessment of Proportional Conflict Redistribution Rules for Forest Fire Detection*”, International Journal of Latest Trends in Engineering and Technology, Vol. 9 (4), PP 115-121 , February 2018 ISSN 2319-3778.

62. T. Suresh and Dr. A. Murugan “*Cold LOGIK and RDHX Solution for Data Center Energy Optimization*”, International Journal of Engineering and Technology(UAE), **ISSN: 2227-524X**, Vol 7(3.4), PP 113 -117, 2018. DOI: 10.14419/ijet.v7i3.4.16757 (**Scopus Indexed**)
63. T. Suresh and Dr. A. Murugan, “*Strategy for Data Center Optimization - Improve Data Center capability to meet business opportunities*” In proceeding of the IEEE International Conference On I-SMAC (Iot In Social, Mobile, Analytics And Cloud), Coimbatore, Aug 2018.
64. J. Vijayalakhmi and **A. Murugan**, “*Revamp Perception of Bitcoin Using Cognizant Merkle*”, Accepted for publication in ASIC Springer Proceedings, Fifth International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA 2018).
65. 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, Vol. 13(13), PP 11261-11266, 2018. <http://dx.doi.org/10.14419/ijet.v7i3.4.16767>
66. 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(UAE), **ISSN: 2227-524X**, Vol 7 (3.4), PP167-173, 2018.
67. **A. Murugan** and Thilagavathy R. “*Triple Encryption Scheme with Parallel Zigzag Pattern for Cloud Data Storage Scheme.*” *International Journal of Applied Engineering Research (IJAER)*, pp. 15766-15772, Vol. 13 (22), 2018.
68. Punitha. K and **A Murugan** “*A Novel Algorithm for DNA Sequence Compression*”, In Proceedings of Springer Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA 2019), Vol. No.882,PP 151-159,Bangalore, 2019.
69. T. P Umadevi and **A Murugan** “*Multi-language Handwritten Recognition in DWT Accuracy Analysis*”, In Proceedings of Springer Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA 2019), Vol. No.882,PP 205-220,Bangalore, 2019.
70. P. Sudha, and **A. Murugan**, “*Intellectual Fusion Rule for Detection of Forest Fire*” *International Journal of Engineering & Technology(UAE)*, **ISSN: 2227-524X** - Accepted for publication
71. R. Thilagavathy and **A. Murugan**, “*Cloud storage security scheme for image encryption using modified morse and zigzag pattern*”, *International Journal of Engineering & Technology(UAE)*, **ISSN: 2227-524X**, pp. 6290-6296, Vol. 7 (4), 2018.
72. Vijayalakshmi J. and **Murugan A**, “*Revamp Perception of Bitcoin Using Cognizant Merkle*”, In Proceedings of Springer Conference on Emerging Research in Computing, Information, Communication and Applications(ERCICA 2019), Vol. No.882,PP 141-150,Bangalore, 2019
73. K. Anusha and **A. Murugan**, “*Stock Market Risk Assessment Using Data Mining Techniques*”, International conference on Soft Computing and Optimization techniques (ICSO'19), P 66(Abstract), Charulatha Publications, Kamaraj College, Thoothukudi, Tamil Nadu on 9th & 10th Aug' 2019.
74. **A. Murugan**, J. Vijayalakshmi, “*Discovering the Bitcoin Double Spend using lost Agreement Amount*”, *International Journal of Recent Technology and Engineering*

- (IJRTE), ISSN:2277-3878, Vol. 8(3), PP 3764-3770, September 2019. (**Scopus Indexed**).
75. **A. Murugan**, J. Vijayalakshmi, “*Preventing the Bitcoin Double Spend using Transaction Hash and Unspent Transaction Output*”, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Vol. 8(3), PP 3771-3776, September 2019. (**Scopus Indexed**).
  76. K. Shyamala, S. Kalaivani and **A. Murugan**, *A Framework to improve the Web Performance using Reorganization, Optimized Prediction and Prefetching*, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878- Accepted for publication. (**Scopus Indexed**).
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### ***National Conference Publications***

1. **A. Murugan** and K.S. Easwarakumar. An  $O(n \cdot \max(\gamma(G), \Delta(G)))$  time algorithm for non-bondage number of a Graph. National Workshop on Machine Intelligence using Soft Computing (NWMISC'03), R.M.K Engineering College, Chennai, India, August 2003.
2. **A. Murugan** and K.S. Easwarakumar. Transposition Operation in DNA Computing and its Applications. In Proceedings of the Fifth National Conference on Recent Trends in Advanced Computing (NCRTAC-05), P 158-165, Manonmaniam Sundaranar University, Tirunelveli, India, Feb 2005.
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8. T. A. Vinayagam and **A. Murugan**. "Empirical evaluation of object oriented methodologies for project management of object oriented software development. National Conference on Research Areas in Computer Science. P 47 (Abstract). SRM University, Chennai. April 2008.
9. P.J. P. J Arul Leena Rose and **A. Murugan**. "*Content Based Image Retrieval by Statistical Distribution of Color Histogram Method*". Periyar University, Salem. April 2008
10. **A. Murugan**, V. Raja, J. Madhivadhanan and K. S. Suresh. "*A new steganographic method - Using random number generation*". National Conference on Emerging Trends in Information and Communication Technology (ETICT '09). P10-13. Saveetha Engineering College, Chennai. March '09.
11. Grasha Jacob and **A. Murugan**. "*A New approach to Numbers in DNA Computing*", National Conference on Emerging Trends in Knowledge Engineering, Thiagarajar College of Engineering, Madurai, India, Nov 2010.
12. P.J. Arul Leena Rose and **A. Murugan** *STFT analysis for Fingerprint Enhancement*, In Proceedings of National Conference on image processing (NCIP-2011), ISBN 978-81-908341-1- 7, SRM University, Chennai, Feb 14-15 2011.
13. T. SriDevi and **A. Murugan**. "*Rough set theory based variable reduction for breast cancer diagnosis*". Second National Conference on Trends and Challenges in Research areas of Computer Science (NCRACS-2012), P 35(Abtract), Presidency College, Chennai, India, Feb 2012.
14. S. Meenakshi and **A. Murugan**. "*Concepts and applications of data warehousing and data mining in E-Governance*", In Proceedings of the National Conference on Challenges in Business Practices (CIBP – 2012), P 143-146, Bhaktavatsalam Memorial College for Women, Chennai, India, Organized by Department of Humanities and Information Technology, Mar 2012.
15. B. Lavanya and **A. Murugan**, "*A Novel Approach to find Closed Repetitive Gapped Subsequences from Multiple Sequences using DNA operations*", National Conference on Recent Trends in Intelligent Systems (RTIS'15), P 26 (Abstract), University of Madras, Chennai, India, March 2015. ISBN 978-93-80366-19-7.
16. S. Saranya and A Murugan, "*Wikipedia based generalized domain ranking using semi-supervised learning*", National Conference On Innovative Information Technologies (NCIIT), Thiruthangal Nadar College, Chennai, Sep. 2018.
17. C. Swarnamugi and A Murugan, "*Underwater image enhancement using fusion based adaptive channel equalization algorithm*", National Conference On Innovative Information Technologies (NCIIT), Thiruthangal Nadar College, Chennai, Sep. 2018.

### **Contributions to the College/University**

#### *Placement Officer*

Served as a Placement Officer of Dr. Ambedkar Govt. Arts College, from June 2005 to Nov'2011.

#### *National Service Scheme*

Served as a NSS Programme Officer of Dr. Ambedkar Govt. Arts College from Aug. 2002 to Nov. 2006

*National Cadet Caps*

Served as a N C C Care Taker of Dr. Ambedkar Govt. Arts College from Dec. 2003 to June' 2005.

*Question Paper Setter*

Question paper setter for Bharathidasan University, Periyar University, Pondicherry University, Madurai Kamarajar University, various autonomous colleges and Tamil Nadu Public Service Commission (TNPSC).

*UGC Coordinator*

Serving as a UGC Nodal officer for Dr. Ambedkar Govt. Arts College from June 2015 onwards.

*Bursar*

Served as a Bursar in-charge of Dr. Ambedkar Govt. Arts College from November 2018 to December 2018 (Two Months).

*Chief Superintendent of Examination*

University of Madras, May 2009, Even semester Examinations

Nov'2015 End Semester Examinations of Dr Ambedkar Govt. Arts College, Chennai  
– 39.

*ICT Academy Coordinator*

Serving as a ICT Academy coordinator for Dr. Ambedkar Govt. Arts College from June 2021 onwards.

*IQAC Coordinator*

Serving as a IQAC Coordinator for Dr. Ambedkar Govt. Arts College from Jan 2022 onwards.