

Name of the Faculty: Dr. T. Velmurugan, M.Sc. M.Phil. PGDCA B.Ed. Ph.D.

Designation: Head Incharge

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Specialization: Data Mining, Networks, Compiler Design

ACHIEVEMENTS

- Appreciation Award: For submitting FOUR research papers in the conference: Int. Conference on Information and Convergence Technology for Smart Society, Bangkok, Thailand, 21- 24 Jan. 2015
- Certificate of Reviewing by Elsevier.
- Best Researcher Award: The 2nd International Conference on computing paradigms held at Don Bosco College, Chennai, from 22 to 24 July, 2016.
- Invited Speaker: The 10th Int'l Conference on Computational Intelligence and Software Engineering (CiSE 2018) held on January 5-7, 2018 in Bangkok, Thailand.
- Best Faculty Award: Republic Day Achievers Award, Awarded by Integrated Intelligent Research, Chennai for the Best Research Work titled as Network Optimization on 18/01/2018.
- Invited Speaker: 4th International Conference on Computing Paradigms (ICCP-2018) held on 20-22 July 2018 at Don Bosco College, Yelagiri Hills, Vellore District, Tamil Nadu, India.
- Invited Speaker: International Conference on “Emerging Inventive Technologies in Computer Science” February 2019 at Idhaya College for Women, Kumbakonam – 612 001, Tamil Nadu, India.
- Best paper Award: Velmurugan. T and T.Santhanam, “Performance Analysis of K-Means and K-Medoids Clustering Algorithms for a randomly generated data set”, Proc. of the Int. Conference on Systemics, Cybernetics and Informatics, Hyderabad, India, January 2008, pp. 578-583.

MEMBERSHIP

National

- Board of Studies for the following Institutions Periyar University, Salem, Tamil Nadu, India, for B.Sc. Computer Science and B.C.A. Presidency College, Chennai – 05 for M.Phil and MCA. Ethiraj College for Women for B.Sc. Computer Science. JBAS College for women, Tenampet, Chennai. Dr. Ambedkar Govt. Arts College, Chennai – 32 for M.Phil. Computer Science. Govt. Arts College for Men, Nandanam, Chennai for M.Phil. and M.Sc. Computer Science. RKM

Vivekananda College, Chennai for B.Com (CA). Guru Nanak College, Velachery, Chennai for B.Sc. (Computer Science). Quid-E-Millath College for Women, Chennai.

- Member, Expert Committee for Course Affiliation, University of Madras, Chennai -05

International

- Member in Academic Social Networks
- https://www.researchgate.net/profile/Dr_Velmurugan_T Researchgate.net
- <https://www.linkedin.com/in/dr-velmurugan-t-02668026/> LinkedIn.com
- <https://scholar.google.co.in/citations?hl=en&user=jyvdyRwAAAAJ> Google Scholar
- <https://dgvaishnavcollege.academia.edu/DrTVelmurugan> Academia.edu
- <https://www.mendeley.com/profiles/velmurugan-thambusamy/> Mendeley.com
- <https://www.growkudos.com/profiles/151580> GrowKudos.com
- <https://www.datasciencecentral.com/profile/Velmurugan> Data Science Central

PROJECTS

PUBLICATIONS

Journals (Total Journals: 60)

International

- Performance Comparison between k-Means and Fuzzy C-Means Algorithms using Arbitrary Data Points, Velmurugan. T, Wulfenia Journal, Vol 19, No. 8, (Aug-2012), 234-241,
- A State of Art Analysis of Telecommunication Data by k-Means and k-Medoids Clustering Algorithms, Velmurugan. T, Journal of Computer and Communications, Vol. 6, Issue 1, (2018), 190-202,
- Measures for predicting success factors of ELearning in Educational institutions, A.S.Arunachalam and T. Velmurugan, International Journal of Pure and Applied Mathematics, Vol. 118, No. 18, (2018), 3673-3678,
- Preprocessing by Contrast Enhancement Techniques for Medical Images, S. Perumal and T. Velmurugan, International Journal of Pure and Applied Mathematics, Vol. 118, No. 18, (2018), 3681-3687,
- Clustering techniques on brain MRI, A. Naveen, T. Velmurugan, Indian Journal of Public Health Research and Development, Vol. 9, Issue 2, (2018), 430-435,
- Analyzing student performance using evolutionary artificial neural network algorithm, A.S.Arunachalam, T. Velmurugan, International Journal of Engineering and Technology, Vol. 7, No. 2.26, (2018), 67-73,

- Lung cancer detection and classification on CT scan images using enhanced artificial bee colony optimization, S. Perumal, T. Velmurugan, International Journal of Engineering and Technology, Vol. 7, No. 2.26, (2018), 74-79,
- Benchmarking Attribute Selection Techniques For Microarray Data, Deepalakshmi, S, T. Velmurugan, ARPN Journal of Engineering and Applied Sciences, Vol. 13, No. 1, (2018), 3740-3748,
- Analysis of Student Academic Performance Using Clustering Techniques, K. Govindasamy, T.Velmurugan, International Journal of Pure and Applied Mathematics, Vol. 119, No. 15, (2018), 309-323,
- Cluster based performance analysis for Diabetic data, K.Saravananathan, T. Velmurugan, International Journal of Pure and Applied Mathematics, Vol. 119, No. 16, (2018), 399-410,
- Relative recital of AODV and DSR Routing Protocol with increasing the mobile nodes in MANET, T.Velmurugan, S. Navitha, International Journal of Pure and Applied Mathematics, Vol. 119 No. 16, (2018), 421-438,
- An Implementation of Substitution Techniques in Cloud Security using Playfair and Caesar algorithms, S.Karthiga, T.Velmurugan, International Journal of Pure and Applied Mathematics, Vol. 119 No. 17, (2018), 509-524,
- Application of Utility Mining using Frequent Itemset and Association Rules: A Survey, T. Indhumathy, T.Velmurugan, International Journal of Data Mining Techniques and Applications, Vol. 07, Issue 01, (2018), 100-110,
- Evaluation of Named Entity Recognition Algorithms Using Clinical Text Data, J.Manimaran, T.Velmurugan, International Journal of Engineering & Technology, Vol. 7, No. 4.5, (2018), 297-302,
- Clustering Algorithms In Educational Data Mining: A Review, C. Anuratha, T.Velmurugan, Int. Journal of Power Control and Computation (IJPCSC), Vol 7. No.1, (2017), 47-52,
- A Clustering and Genetic Algorithm based Feature Selection (CLUST-GA-FS) for High Dimensional Data, S. Deepalakshmi and T. Velmurugan, Int. Journal of Control Theory and Applications, Vol. 10, Issue 23, (2017), 63-76,
- A Study on Classification and Clustering Data Mining Algorithms based on Students Academic Performance Prediction, K. Govindasamy and T. Velmurugan, Int. Journal of Control Theory and Applications, Vol. 10, Issue 23, (2017), 147-160,
- Segmentation of MRI Brain Images: A Comparative Analysis, S. Mahalakshmi, T. Velmurugan, Int. Journal of Control Theory and Applications, Vol. 10, Issue 23, (2017), 161-172,
- A Survey on the Security Issues of Software Defined Networking Tool in Cloud Computing, S.Karthiga and T.Velmurugan, International Journal of Business Intelligents, Vol. 6, issue 2, (2017), 27-33,
- A Survey on the Analysis of Dissolved Oxygen Level in Water using Data Mining Techniques, R.Arunkumar and T.Velmurugan, International Journal of Data Mining Techniques and Applications, Vol. 6, Issue 2, (2017), 43-51,

- Evaluation of lexicon-and syntax-based negation detection algorithms using clinical text data, J.Manimaran, T.Velmurugan, Bio-Algorithms and Med-Systems, Vol. 13, Issue 4, (2017), 201-213,
- An Analysis of Fuzzy C Means and Logical Average Distance Measure Algorithms using MRI Brain Images, A. Naveen,T. Velmurugan, International Journal of Computing Algorithm, Vol. 06, Issue. 02, (2017), 65-73,
- An Efficient Logical Average Distance Measure Algorithm (LADMA) to analyse MRI Brain Images, A. Naveen,T. Velmurugan, International Journal of Data Mining Techniques and Applications, Vol. 06, Issue. 02, (2017), 56-61,
- Stability of Indexed Microarray and Text Data, Velmurugan. T, S. Deepalakshmi, International Journal of Computing Algorithm, Vol. 6, Issue 2, (2017), 64-68,
- Extraction of Cancer Affected Regions in Mammogram Images by Clustering and Classification Algorithms, E. Venkatesan, T. Velmurugan, Indian Journal of Science and Technology, Vol. 9, Issue 30, (2016),
- Classification Algorithm based analysis of Breast cancer data, B. Padmapriya, T.Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 5, Issue 1, (2016), 43-49,
- Technology Enabled Learning to Improve Student Performance: A Survey, M. Pazhanivel, T.Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 5, Issue 1, (2016), 50-56,
- A Survey on the Result Based Analysis of Student Performance using Data Mining Techniques, K. Govindasamy, T.Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 5, Issue 1, (2016), 91-95,
- Simulation Model Based Performance Analysis of DSR and TORA Routing Protocols in MANET, S. Navitha, T.Velmurugan, Int. Journal of Communication and Networking System, Vol. 5, Issue 1, (2016),
- Effective Fuzzy C Means Algorithm for the Segmentation of Mammogram images of Identifying Breast Cancer, T. Velmurugan, E.Venkatesh, Int. Journal of Control Theory and Applications, Vol. 9, Issue 10, (2016), 4647-4660,
- Analysing MRI Brain Images Using Fuzzy C–Means Algorithm, T. Velmurugan, A.Naveen, Int. Journal of Control Theory and Applications, Vol. 9, Issue 10, (2016), 4661-4675,
- Empirical Study of Feature Selection Methods for High Dimensional Data, S. Deepalakshmi, T. Velmurugan, Indian Journal of Science and Technology, Vol. 9, Issue 39, (2016),
- Analyzing Diabetic Data using Classification Algorithms in Data Mining, K.Saravananathan, T. Velmurugan, Indian Journal of Science and Technology, Vol. 9, Issue 43, (2016),
- Fast Boost Decision Tree Algorithm: A novel classifier for the assessment of student performance in Educational data, C. Anuratha,T.Velmurugan, Ciencia e Tecnica, Vol. 31, No. 11, (2016), 139-155,

- Performance Evaluation of Feature Selection Algorithms in Educational Data Mining, C. Anuratha, T. Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 5, Issue 2, (2016), 131-139,
- Efficiency of k-Means and k-Medoids Clustering Algorithms using Lung Cancer Dataset, A. Dharmarajan, T. Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 5, Issue 2, (2016), 150-156,
- Efficiency of Fuzzy C Means algorithm for Brain Tumor segmentation in MR Brain Images, T. Velmurugan, S. Mahalakshmi, Int. Journal of Engineering and Technology, Vol. 8, No 6, (2016), 2979-2989,
- A Novel Approach to Find Tumor in MRI Brain Images using Image Segmentation Techniques, S. Mahalakshmi, T. Velmurugan, Int. Journal of Control Theory and Applications, Vol. 9, Issue 40, (2016), 43-55,
- Segmentation of Mammogram Image using Multilevel Threshold and Gravitational Search Algorithm, T. Velmurugan, M.P. Sukassini, Int. Journal of Control Theory and Applications, Vol. 9, Issue 40, (2016), 67-75,
- A Novel Layer Based Logical Approach (LLA) Clustering Method for Performance Analysis in Medical Images, A. Naveen, T. Velmurugan, Int. Journal of Control Theory and Applications, Vol. 9, Issue 40, (2016), 99-109,
- A Survey on Educational Data Mining Tools and Techniques, A.S. Arunachalam and T. Velmurugan, International Journal of Data Mining Techniques and Applications, Vol. 5, Issue 2, (2016), 167-171,
- Image Segmentation Based Survey on the Lung Cancer MRI Images, S. Perumal and T. Velmurugan, International Journal of Data Mining Techniques and Applications, Vol. 5, Issue 2, (2016), 172-177,
- Lung Cancer Data Analysis by k-means and Farthest First Clustering Algorithms, A. Dharmarajan, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 15, (2015),
- A Comparative Analysis on the Evaluation of Classification Algorithms in the Prediction of Students Performance, C. Anuratha, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, Issue 15, (2015),
- Analysing the quality of Association Rules by Computing an Interestingness Measures, Manimaran, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 15, (2015),
- A Novel Framework CACTO- subject to Non-Relational Data Stores, G. Sekar and T. Velmurugan, Ciencia e Tecnica, Vol. 30, No. 7, (2015), 124-141,
- Detection of Brain Tumor by Particle Swarm Optimization using Image Segmentation, S. Mahalakshmi, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 22, (2015),
- A Survey on the Analysis of Segmentation Techniques in Mammogram Images, M. P. Sukassini, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 22, (2015),

- Identification of Calcification in MRI Brain Images by k-Means Algorithm, A. Naveen, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 29, (2015),
- Performance Analysis of Decision Tree Algorithms for Breast Cancer Classification, E. Venkatesan, T. Velmurugan, Indian Journal of Science and Technology, Vol. 8, No. 29, (2015),
- A survey on the Simulation Models and Results of Routing Protocols in Mobile Ad-hoc Networks, S. Navitha, T. Velmurugan, Int. Journal of Communication and Networking System, Vol. 04, Issue 02, (2015), 10-15,
- Prediction of Tumor in Classifying Mammogram images by k-Means, J48 and CART Algorithms, E. Venkatesan, T. Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 04, Issue 02, (2015), 29-34,
- Effective Approaches of Classification Algorithms for Text Mining Applications, U. Latha and T. Velmurugan, Int. Journal of Data Mining Techniques and Applications, Vol. 04, Issue 02, (2015), 40-44,
- Performance Based Analysis Between k-Means and Fuzzy C-Means Clustering Algorithms for Connection Oriented Telecommunication Data, Velmurugan. T, Applied Soft Computing, Vol. 19, (2014), 134 - 146,
- Efficiency of k-Means and K-Medoids Algorithms for Clustering Arbitrary Data Points, Velmurugan. T, Int. J. Computer Technology & Applications, Vol. 3, Issue 5, (2012), 1758-1764,
- A Survey of Partition Based Clustering Algorithms in Data Mining: An Experimental Approach, Velmurugan. T, T. Santhanam, Information Technology Journal, Vol. 10, Issue 3, (2011), 478-484,
- A Comparative Analysis between K-Medoids and Fuzzy C-Means Clustering Algorithms for Statistically Distributed Data Points, Velmurugan. T, T. Santhanam, Journal of Theoretical and Applied Information Technology, Vol. 27, No. 1, (2011), 19-30,
- Computational Complexity between K-means and K-medoids clustering algorithms for normal and uniform distributions of data points, Velmurugan. T, T. Santhanam, Journal of Computer Science, Vol. 6, Issue 3, (2010), pp.363-368,
- Performance Evaluation of K-Means and Fuzzy C-Means Clustering Algorithms for Statistical Distributions of Input Data Points, Velmurugan. T, T. Santhanam, European Journal of Scientific Research, Vol. 46, No. 3, (2010), 320-330,
- Clustering Mixed Data Points Using Fuzzy C-Means Clustering Algorithm for Performance Analysis, Velmurugan. T, T. Santhanam, International Journal on Computer Science and Engineering, Vol. 02, No. 09, (2010), 3100-3105,

SEMINARS/ WORKSHOPS/ CONFERENCE/ SYMPOSIUM

National

- National Level Conference on Bio-Metrics
- A comparative study of Support Vector Machines and Neural Networks
- A Cross Comparison of two Clustering Algorithms
- Data Mining in Business – An Overview
- Clustering Techniques in Data Mining –An Overview
- Performance Analysis of K-Means and K-Medoids Clustering Algorithms for a randomly generated data set
- Clustering of random data points using K-Means and Fuzzy-C Means Clustering Algorithms
- Implementation of Fuzzy C-Means Clustering Algorithm for Arbitrary Data Points
- Implementation of Fuzzy C-Means Clustering Algorithm for Arbitrary Data Points
- Evaluation of k-Medoids and Fuzzy C-Means Clustering Algorithms for Clustering Telecommunication Data
- Exudates detection using Fuzzy C-Means algorithm in Image data
- A Survey of Association Rule mining using text Applications
- Applications of partition based clustering algorithms: A survey
- A Survey of Association Rule mining in text Applications
- National Summit on Advancement and Automation of Accreditation for Higher Education in India held on 4th Feb. 2017 at Chennai.

International

- Clustering Arbitrary Data Points by k-Medoids and Fuzzy C-Means Algorithms
- A Data Mining based Survey on Student Performance Evaluation System
- A Survey on Breast Cancer Analysis Using Data Mining Technique
- Clustering Lung Cancer Data by k-Means and k-Medoids Algorithms
- A Comprehensive Survey on Filter approach to Feature Selection methods for high Dimensional Data
- Implementing Association Rules in Medical diagnosis test data
- Smart ways for Fault-Tolerant transaction management in Non-Relational Distributed Database System
- System and Convergence Applications
- 1st International Conference on computing paradigms held at Don Bosco College, Yelagiri Hills from 24 and 25 July, 2015.
- Role of Classification Algorithms in Medical domain: A Survey

- Image Segmentation in Medical Data: A Survey
- A Survey on Medical Images Extraction using Parallel Algorithm in Data Mining
- Impact of Classification Algorithms in Diabetes Data: A Survey
- Analyzing Agricultural Text Data using Classification Algorithms
- Feature Selection Techniques to Analyze Student Academic Performance Using Naïve Bayes Classifier
- Noise removal using Morphology and Median filter Methods in Mammogram Images
- Performance Analysis of AODV and DSR routing Protocols in Mobile Ad-hoc Networks
- 2nd International Conference on computing paradigms held at Don Bosco College, Chennai, from 22 to 24 July, 2016.
- 10th International Conference on Computational Intelligence and Software Engineering (CiSE 2018) held on January 5-7, 2018 in Bangkok, Thailand.
- A Study On Analysis Of Graph Clustering Techniques In Feature Selection
- 3rd International Conference on computing paradigms held at Don Bosco College, Elagiri Hills, from 21 to 22 July, 2018.

RESEARCH GUIDANCE

Ph.D Awarded	7
Ph.D Students	8
M.Phil Awarded	301
M.Phil Students	

ADDITIONAL INFORMATION

BIOGRAPHY

- Dr. T. Velmurugan is working as an Associate Professor in the PG and Research Department of Computer Science and Applications, D.G.Vaishnav College, Chennai-600106, India. Also, he is the Head of the Department of Computer Science and Applications (UG). He holds a Ph.D. degree in Computer Science from the University of Madras and a Master and Bachelor degree of science in Mathematics from Bharathidasan University.

He has published more than 75 articles in journals indexed in the Web of Science – Journal Citation Reports and in SCOPUS such as Applied Soft Computing, Journal of Computer

Science, Information Technology Journal, Indian Journal of Science and Technology and etc. He acted as a Chair Person in the International Conference on Information and Convergence Technology for Smart Society held at Swissotel Le Concorde, Bangkok, Thailand, 2015. He was an invited speaker of the 10th Int'l Conference on Computational Intelligence and Software Engineering (CiSE 2018) held from January 5-7, 2018 in Bangkok, Thailand. He has guided more than 300 M.Phil. Research Scholars in the field of Computer Science. He guided 4 Ph.D. scholars and currently guiding 10 Ph.D. scholars in the same field. He served as a nominated Senate Member in Middle East University, Dubai, UAE for a period of three years.

He is a member in Board of studies for many autonomous institutions and Universities like Periyar University, Salem, India. He hosted a lot of programmes in Doordharsan television about recent topics in Information Technology field. He arranged and acted as an Organizing Secretary of International Conference on Computing and Intelligence Systems (ICCIS 2015). In addition, he was a resource person for various national workshops entitled "Scientific Research Article Writing and Journal Publications". He is an editorial board member of many International Journals. He is also a reviewer in many peer reviewed journals like Elsevier, Springer, IOSPress Journals etc. Further, he is a visiting faculty for M.Phil. course for various universities throughout India.