



# TAGORE ENGINEERING COLLEGE

(A Member of Tagore Group of Institutions Chennai)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

ACCREDITED BY IQAC-NAAC WITH 'A' GRADE

## FACULTY PROFILE

PERSONAL DETAILS			
Name & Qualification	Dr.R.Ramesh M.E., Ph.D		
Designation	Professor & Principal		
Department	ECE		
Total Teaching Experience	21 years & 4 months		
Total Research Experience	13 years		
Total Industry Experience	Nil		
Area of Specialization	Digital Signal Processing		
AICTE Faculty ID	1-11268975950		
Email ID	nclramesh@gmail.com		
EDUCATIONAL DETAILS			
Degree	Branch/ Specialization	University	Year
UG	ECE	Madurai kamaraj University	1999
PG	Communication Systems	Madurai kamaraj University	2000
Ph.D	Digital Signal Processing	SRM University	2009
RESEARCH / PUBLICATION DETAILS			
Publications in Journal			
<p>1. R. Ramesh, Alwin Vinifread “Fast synchronization of distributed generators with power grid under transient conditions using hybrid optimization algorithm” Optimum Control Applications and Methods, Vol 42, No.3, pp.700-716, 2021.</p> <p>2. R. Ramesh ,S. Feslin Anish Mon and S. Godfrey Winster “Trust model for IOT using cluster analysis: A Centralized approach” Wireless Personal Communication, 2021.</p> <p>3. R. Ramesh ,Sabaresan Venugobal and S. Godfrey Winster “Cyber forensic framework for big data</p>			

- analytics using sunflower jaya optimization- based Deep stacked autoencoder” International Journal of Numerical Modeling, 2021.
4. R.Ramesh ,A.Siva Kumar and S. Godfrey Winster “Efficient sensitivity orient blockchain encryption for improved data security in cloud” Concurrent Engineering: Research and Applications, 2021.
  5. R.Ramesh, C. Chellaswamy et.al “Optimized railway track health monitoring system based on dynamic differential evolution algorithm” Measurement, Vol.15, pp.21-18, 2020.
  6. R.Ramesh, Alwin Vinifread and P. Prakesh “Grid Variables Synchronization using optimization algorithm for distributed generation system under grid fault conditions” International Journal of Engineering and Advanced Technology, Vol.8, No.5, pp.2658-2665, 2020.
  7. R.Ramesh and R. Valarmathi “Motion Artifacts Detection algorithm for non contact photoplethysmography using five tap filter” International Journal of Engineering and Advanced Technology, Vol.8, No.5, pp.1333-1336, 2019.
  8. R. Ramesh, S. Praveenkumar and T. Aravind “Design and Material Analysis For Prototyping of four arm Mechanical Microgripper with Self-locking and Anti-slipping Capability” Microsystem Technologies, Vol.25, pp. 851-860, 2019.
  9. R. Ramesh, S. Praveenkumar and Srigitha S Nath “Computational Modelling of Dielectrophoretic Microfluidic Channel For Simultaneous Separation of Red Blood Cells and Platelets” Current Signal Transduction Therapy, Vol.14 ,pp.1-8, 2019.
  10. R. Ramesh, S. Praveenkumar and T. Aravind “Modelling of Chevron Electrothermal actuator and its performance analysis” Microsystem Technologies , Vol. 24, No.4, pp.1767-1774, 2018.
  11. R. Ramesh, S. Praveenkumar and T. Aravind “Selective Absorption Of Low Density Lipoprotein From Blood Using Porous Silicon” Advanced Materials Letters, Vol.9(2), pp.142-147, 2018.
  12. R. Ramesh ,Chellaswamy, Muthammal and Pragadeeshkumar “Reduction of Power Fluctuation in Wind Turbine Using Variable Frequency Transformer and Optimized PID controller” Asian Journal of Applied Sciences, Vol.5, No.5, pp.868-877, 2017
  13. R. Ramesh and C. Chellaswamy “Future renewable energy option for recharging full electric vehicles” Renewable and Sustainable Energy Reviews, Vol.76, pp. 824-838, 2017.
  14. R. Ramesh, Anita Christaline and D.Vaishali “Bio Inspired Optimization For Universal Spatial image steganaiysis” Journal of Computational Science, Vol.21, pp.182-18, 2017.
  15. R. Ramesh, D.Vaishali and Anita Christaline “Histopathology image analysis and classification using ARMA models :Application to brain cancer detection” Current Medical Imaging Reviews, Vol .13, Issue 3, pp. 355-361, 2017.

- 16.R. Ramesh and S. Praveenkumar “Analysis of different size microchannel through particle tracing for biomedical separation” *Journal of Computational and Theoretical Nanoscience*, Vol.14, Issue. 7, pp.3351-3355, 2017.
- 17.R. Ramesh, S. Praveenkumar and T. Aravind “Study on different meander structured microchannel :A Biofilter” *Biomedical Research (India)*, Vol.28, Issue 8, pp.3688-3692, 2017.
- 18.R. Ramesh, S. Praveenkumar and T. Aravind “Silicon Based Bio-filter for bio-molecule separation” *Biomedical Research (India)*, Vol.28, Issue. 9, pp. 4181-4186, 2017.
- 19.R. Ramesh, Anita Christaline and D.Vaishali “Nature Inspired metaheuristics for improved JPEG steganalysis” *Multimed Tools Appl. Springer*, Vol.17, pp. 13701-13720, 2017.
- 20.R. Ramesh, D.Vaishali and Anita Christaline “Texture Analysis Using Wavelet -Based Multiresolution Autoregressive Model: Application to Brain Cancer Histopathology” *Journal of Medical Imaging and Health Informatics*, Vol.7, pp. 1-8, 2017.
- 21.R. Ramesh and S. Philomina “TRR-AODV based Performance Enhancement in Mobile Ad Hoc Network” *Journal of Adv Research in Dynamical and Control Systems*, Vol.9, No.1, pp. 35 -40, 2017.
- 22.R. Ramesh, S. Praveenkumar and Jenifer Johnsi “Bacterial Nano-Network Optimization Using Wireless Adhoc Sensors” *Asian Journal of Science and Technology*, Vol.13, No.7, pp.3192-3195, 2016.
- 23.R. Ramesh, S. Praveenkumar and T. Aravind “Polymer based Bio-Filter” *Journal of Advances in Chemistry*, Vol. 13, No. 7, pp. 6327-6332, 2016.
- 24.R. Ramesh, S. Praveenkumar and T. Aravind “Porous Based Immunosensor For Detection of Ldl Molecules From Blood Serum Using Array of Cantilever Beam” *Journal of Advances in Chemistry*, Vol. 4, No.4, pp. 2560-2566, 2016.
- 25.R. Ramesh, S. Praveenkumar and T. Aravind “Comparison of Different Materials on Performance of Chevron Shaped Electrothermal Microgripper” *International Journal of Printing and Packaging and Allied Sciences*, Vol. 4, No.4, pp. 2560-2566, 2016.
- 26.R. Ramesh, S. Praveenkumar and T. Aravind “Design and Stimulation of Piezoelectric Based MEMS Force Sensor” *International Journal of Printing and Packaging and Allied Sciences*, Vol. 4, No.4, pp.2598-2604, 2016.
- 27.R. Ramesh, S. Praveenkumar and T. Aravind “Isolation and Deduction of Low Density Lipoprotein Using Porous Silicon Based Array of Cantilever” *International Journal of Printing and Packaging and Allied Sciences*, Vol. 4, No.4, pp. 2488-2496, 2016
- 28.R. Ramesh, Anita Christaline and D.Vaishali “Optimizing JPEG Steganalysis” *International*

- Journal of Multimedia and Ubiquitous Engineering, Vol.11, No.1, pp.385-396, 2016.
- 29.R. Ramesh, Anita Christaline and D.Vaishali “Bio-Inspired Computational Algorithms for Image Steganalysis” Indian Journal of Science and Technology, Vol. 9, No. 10, pp.1-10,2016.
- 30.R. Ramesh and C. Chellaswamy “Parameter extraction of solar cell models based on adaptive differential evolution algorithm” Renewable Energy, Vol.97, pp.823-837, 2016.
- 31.R. Ramesh, D.Vaishali and Anita Christaline “Quarter Plane ARMA Model for Analysis and Classification of histopathology Images :Application to Cancer Detection” Indian Journal of Science and Technology, Vol. 9, No. 22, pp.1-8, 2016.
- 32.R. Ramesh, D.Vaishali and Anita Christaline “Performance Evaluation of Cancer Diagnostics Using Autoregressive Features with SVM Classifier: Applications to Brain Cancer Histopathology” International Journal of Multimedia and Ubiquitous Engineering, Vol.11, No.6, pp.241-254, 2016.
- 33.R. Ramesh and C. Chellaswamy “An optimal Parameter extraction and crack identification method for solar photovoltaic modules” ARPN Journal of Engineering and Applied Sciences, Vol.11, No.24, pp.14468-14481, 2016.
- 34.R. Ramesh and C. Chellaswamy, “Performance Analysis of a wind duct and SOC estimation for pure electric vehicle charging” International Journal of Control Theory and Applications, Vol.9, Issue 5, pp.2111-2127, 2016.
- 35.R. Ramesh, Anita Christaline and D.Vaishali “Effective models for segmentation and shape tracking of cells” Advances in Intelligent Systems and Computing, Vol.394, pp.973-979, 2016
- 36.R. Ramesh, D.Vaishali and Anita Christaline “Autoregressive modelling: application to mitosis detection in brain cancer histopathology” Int.J. Biomedical Engineering and Technology, Vol.20, No.2, pp.179-193, 2016.
- 37.R. Ramesh, Anita Christaline and D.Vaishali “Critical review of image steganalysis Techniques” International Journal of Advance Intelligence Paradigms, Vol.7, Issue 3, pp.368-381, 2015.
- 38.R. Ramesh and Manish Kumar “Adaptive FIR Filter Using Distributed Arithmetic for Area Efficient Design” International Journal of Scientific and Research Publications, Vol.5, Issue 1, pp.1-6, 2015.
- 39.R. Ramesh and S. Philomina “Maximum Demand Control Using Ad-Hoc Network to Avoid Grid Failure” International Journal of Applied Engineering Research, Vol.10 Issue 1, pp.1439-1448, 2015
- 40.R. Ramesh and P.G. Punitha “Review of Memory Efficient 2-D Finite Impulse Response (FIR) Filter Architecture” Middle- East Journal Of Scientific Research, Vol.23 Issue 5, pp.957-961,

2015.

- 41.R. Ramesh and D. Vaishali "Histopathology Image analysis and classification for cancer Detection using 2-D Autoregressive model" International Review on Computer and software, Vol.10, Issue 2, pp.182-188, 2015.
- 42.R. Ramesh and C. Chellaswamy "An Automatic Charging Mechanism and Electrical Energy Storage for Full Electric Vehicle" International Journal of Applied Engineering Research, Vol.10, Issue 6, pp. 5280-5285, 2015.
- 43.R. Ramesh and L. Reshma "A Self Regulating Tool to Characterize an Abnormal Retina From a Normal Retina Using Neural Network" ARPN Journal of Engineering and Applied Sciences, Vol.10, Issue 10, pp.4673-4678, 2015.
- 44.R. Ramesh and P. Kavitha "VLSI Implementation of Low- Cost Fir Filter Structure Based on Improving Faithfully Rounded Truncated Multiplier" International Journal of Industrial Electronics and Electrical Engineering, Vol.2, Issue-5, pp.53-56, 2014.
- 45.R. Ramesh, Anita Christaline and D.Vaishali "Parametric Evaluation of Images for Classification in View of Steganalysis" International Journal of Engineering Research and Technology, Vol.3 Issue 2, pp.2203-2208, 2014.
- 46.R. Ramesh, Anita Christaline and D.Vaishali "Steganalysis with Classifier Combinations" ARPN Journal of Engineering Research and Technology, Vol. 9, Issue 12, pp. 2858-2863, 2014.
- 47.R. Ramesh and P. Kavitha "VLSI Implementation of Low- Cost Fir Filter Structure Based on Improving Faithfully Rounded Truncated Multiplier" International Journal of Industrial Electronics and Electrical Engineering, Vol.2, Issue-5, pp.53-56, 2014.
- 48.R. Ramesh and R. Radika "FFT/IFFT Mixed Radix Processor for Wireless Applications" International Journal of Innovative Research and Development, Vol.2 Issue 3, pp.525-532, 2013.
- 49.R. Ramesh and R. Sai Saranya "Haze -free Under water Image Enhancement" International Journal of Innovative Research and Development, Vol.2 Issue 3, pp.533-542, 2013.
- 50.R. Ramesh and M. Yazhini "FIR Filter Implementation using Modified Distributed Arithmetic Architecture" Indian Journal of Science and Technology, Vol.6, No.5, pp.4485-4491, 2013
- 51.R. Ramesh, P. Rajeswari and A.R. Ashwatha "Performance Analysis of Flash Analog to Digital Converter With Track and Hold Circuit Using Cadence P spice" Engineering Science and Technology : An International Journal, Vol.3 Issue 3., pp.485-491, 2013.
- 52.R. Ramesh, P. Rajeswari and A.R. Ashwatha "Low Power Design Technique of Flash Type Analog to Digital Converter Based Operational Amplifier" European Journal of Scientific Research, Vol.112 Issue 2, pp.191-197, 2013

- 53.R. Ramesh and R. Nathiya “Realization Of FIR Filter Using Modified Distributed Arithmetic Architecture” Signal & Image Processing : An International Journal, Vol.3, pp.83-94, 2012.
- 54.R. Ramesh, P. Rajeswari and A.R. Ashwatha “An approach to Design Flash Analog to Digital Converter for High Speed and Low Power Applications” International Journal of VLSI Design & Communication Systems, Vol., No-3, pp.125-131, 2012.
- 55.R. Ramesh, P.S. Reddy and A.Rathnam “Row and Column Concatenation methods for Stability Testing of Two Dimensional Recursive Filters” International Journal of Engineering Research and Development, Vol.3, Issue 4, pp.23-28, 2012.
- 56.R. Ramesh, P.S. Reddy and A.Rathnam “Stability Testing of two Dimensional Recursive Filters Using Mapping Methods” International Journal of Engineering and Technology (IJET), Vol.4, No. 4, pp.261-267, 2012.
- 57.R. Ramesh, P.S. Reddy and A. Rathnam “Testing the stability of Recursive QP, NSHP and general Digital Filters of Second Order” IEICE Transaction, Vol. E- 93A, No-8, pp. 1408-1414, 2010.
- 58.R. Ramesh and P.S. Reddy “An Elegant and simple Method to test the Stability of 2-D Recursive Digital Filters” Information Technology Journal, Vol. 5, pp. 1068-1072, 2006.
59. R. Ramesh and P.S. Reddy, “Stability Testing of 1-D and 2-D Digital Filters Using the Method of Complex Integrals” Asian Journal of Information Technology, Vol. 5, pp. 5-11, 2006.

### **60. Conference Proceedings**

1. R.Ramesh & P.S. Reddy Published a Paper Titled “A simple method to test the stability of 2-D Recursive Digital Filters of second order “, in 8th WSEAS International Conference on Signal Processing , Computational Geomrtry and Artificial Vision (ISCGAV’08) held at Rhodes Island, Greece, held on 20th – 22nd August 2008.
2. R.Ramesh & Sunil Kumar Metha Published a Paper Titled “Design of 32bit FFT/IFFT Processor by using mixed radix algorithm with New Butterfly Structure “ in International Conference on Software and Computer Application (ICSCA 2011) held at Kathmandu , Nepal on July 2011
3. R.Ramesh & Shobith Thomas Jacob Published a Paper Titled “Asynchronous Implementation Of Split- Radix FFT Algorithm using FPGA “in International Conference on Advances in Computer Engineering at Trivandrum, Kerala, India on International Conference on Advances in Computer Engineering at Trivandrum, Kerala, India on 2011.
4. R.Ramesh & Anurag Singh Published a Paper Titled” A Fast Hardware Approach for Approximate Efficient Logarithm Computation “at Third National Conference on Digital Convergence (TNCDC-2010)

5. R.Ramesh & Nathiya. R Published a Paper Titled “Realization of FIR Filter Using Modified Distributed Arithmetic Architecture”at Sixth national conference on optimization techniques in Engineering Sciences and Technologies (OPTTEST-2011)
6. R.Ramesh & A. Rathnem Published a Paper Titled “Stability Testing and Quantization Error Estimation For 2-D Recursive Filters by Complex Integrals Method” at Second IEEE International Conference ON Communication Systems and Network Technologies (CSNT-2012)
7. R.Ramesh & A. Rathnem Published a Paper Titled “Stability Testing of Two Dimensional Non Symmetric Half Plane Regressive Filters “at international conference held during IET SEISCON 2012
8. R.Ramesh & A. Rathnem Published a Paper Titled “Stability Testing of Two Dimensional NSHP Filters Using Simplified Mapping Methods “at Third International Conference on Sustainable Energy and Intelligent System
9. R.Ramesh & P.Kavitha Published a Paper Titled “LVSI Implementation of Low cost FIR Filter Structure Based On Improved Faithfully Rounded Truncated Multiplier “ at IRF International Conference, Chennai
- 10.R.Ramesh & C.Chellasamy Published a Paper Titled “A Supervisory Control of a Fuel Free Electric Vehicle for Green Environment “ at IEEE International Conference on Emerging Trends in Electrical Engineering and Energy Management (ICETEEEM-2012)
- 11.. R.Ramesh & S. Priyadharshini Published a Paper Titled “Diagnosis and Analysis of Heart Rate Using Low cost Pulse sensor and Microcontroller “ at International Conference (ICMACE’14) on Trend in Engineering, 2014
- 12.R.Ramesh & S. Priyadharshini Published a Paper Titled “Peak Detection Algorithm for Diagnosis and Analysis of Heart Rate Using Pulse Sensor “at National Conference (NCVIN-14) on VLSI, Image Processing and Networking, 2014
- 13.R.Ramesh & D.Vaishali Published a Paper Titled “2-D Autoregressive Model for Texture Analysis and Synthesis “ at IEEE International Conference on Communication and Signal Processing, 2014
- 14.R.Ramesh & C.Chellasamy Published a Paper Titled “Green Energy Harvesting: Recharging Electric Vehicle for Pollution Free Environment “at IEEE International Conference on Smart Structures and Systems (ISSS-2014)
- 15.R.Ramesh & C.Chellasamy Published a Paper Titled” An Intelligent Energy Management and Control System For Electric Vehicle “at 2014 IEEE International Conference on Advance Communication Control and Computing Technologies

<p>16.R.Ramesh &amp; Neenu Jose Published a Paper Titled “Patch Ordering Based SAR image despeaking via SSC and wavelet thresholding “at International Conference on Soft Computing Systems</p>		
<p>17.R.Ramesh &amp; T.Aravind Published a Paper Titled “Comparative Study of Different Materials on Performance of Chevron Shaped Beat-Beam Thermal Actuator “ at International Conference on Soft Computing Systems</p>		
<p>18.R.Ramesh &amp; K.Arunkumar Published a Paper Titled “Low Power Dynamic Comparator Design For High Speed ADC Application “ at International Conference on Current Trends towards Converging Technologies (ICCTCT)</p>		
<b>Books / Chapters Published</b>		
Nil		
<b>Fund Received</b>		
<ol style="list-style-type: none"> <li>1. FDP On Transmission Lines and Wave Guides received from Anna University of Rs 60,000/- on June 2014</li> <li>2. Workshop on signals and system received from IIT Kharagpur of Rs 1,74,956/- on 2-12 January 2014</li> <li>3. FDP On Electromagnetic Field Theory received Anna University of Rs 90,000/- on December 2013</li> </ol>		
<b>Patent Applied / Published/Granted</b>		
<ol style="list-style-type: none"> <li>1. Innovative Indian Patent, IPR India, filed a patent “NEW METHOD FOR USER AUTHENTICATION USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING APPROACHES” and published on 18.12.2020</li> <li>2. Innovative Indian Patent, IPR India, filed a patent “IOT BASED SMART PARKING SYSTEM FOR MODERN CITIES” and published on 08.05.2020</li> </ol>		
CITATIONS	357	
H-INDEX	09	
<b>RESEARCH GUIDANCE DETAILS</b>		
<b>Sl.No</b>	<b>University</b>	<b>Supervisor ID / Reference</b>
1	Anna University, Chennai	2340267

2	Number of UG Scholars Guided	50
3	Number of PGScholars Guided	70
4	Number of Ph.D. Scholars Guided	7
5	Number of Ph.D. Scholars Pursuing	7

**PROFESSIONAL SOCIETY MEMBERSHIP DETAILS**

<b>Sl.No</b>	<b>Professional Society Name</b>	<b>Member ID</b>
1.	IE (India)----Fellow Member	
2.	ISTE---Life Member	33234
3.	IETE---Life Member	M222214