

RESUME



1. Name: **Dr.P. RANGARAJAN**
2. Father's Name: **Mr.M.Parthasarathy**
3. Date of Birth: **04-04-1969**
4. Mobile /Email id : **9444253828 / rangarajan69@gmail.com**
5. Address for communication : **2/8 , Vinayagar Koil Street, Ayyavu Colony,
Aminjikarai , Chennai-600029,Tamilnadu**
6. Particulars of Educational / Technical Qualifications:

Sl. No.	Degree	Branch	Specialization	Name of the University	Year of Passing	Class / Division obtained
1	U.G. B.E	EEE	Electrical & Electronics Engineering	Coimbatore Institute of Technology Bharathiyar University Coimbatore	1990	First
2	P.G. M.E	Electrical Engineering	Power Electronics	College of Engineering, Guindy, Anna University Chennai	1995	First
3	PhD	Electrical Engineering	VLSI & Signal Processing	College of Engineering, Guindy Anna University Chennai	2004	

7. Experience : Twenty Eight Years

S.No.	Position	From	To	Years & Months
1.	Professor Department of EEE	August ,2013	Till date	14yrs
	Professor & Head Department of EEE	July,2011	July ,2013	
	Professor & Head Department of IT RMD Engineering College	October,2007	June, 2011	
2	Professor/ECE RMK Engineering College	Nov 2004	OCT 2007	

3	Asst. Professor, Dept.of ECE ,Sri Venkateswara College of Engineering, Sriperumbudur	Sep 1991	Oct 2004	13yrs
4	Appaswamy Associates, Chennai	Sep 1990	Aug1991	1yr

8. Ph.D Thesis

Year	Title	Author	Guide	Department	Subject	Degree
2003	Stability Testing and High Speed VLSI Architectures for Two Dimensional Recursive Filters	Rangarajan, P.	Dr. Rajapaul Perinbam J	Electronics and communication engineering	Electronics & Communications Engineering	Ph.D.

9. Best faculty award from CTS 2014-2015



10. Foreign University assignment

Visiting Faculty University of Portsmouth , UK , campus at Myanmar



Programme Title	Bachelor of Electrical Engineering (International)
Module Title	Electronics
Module Start and End Date	18 December 2016 – 07 March 2017

Recognised Research Supervisor of Anna University Chennai ,
Sathyabama University.

7. List of Funded Projects

S.No.	Project Name	Sanctioned by	Year of sanction & Duration	Amount, in Rs
1	AICTE Sponsored International conference EITA2K19 23rd-25th October 2019	AICTE	FNo67-37/RFID/GOC/Policy-1/2017-18 Dated 22/04/2019	Rs5,00,000
2	GOI,Ministry of Science and Technology, Department of Science and Technology -IEDC	DST	DO No 11/06/2013-NEB dated 27/5/13	Rs45,30,000
3	MSME,Buisness Incubator	Ministry of MSME,GOI	NO6(19)/NMCP/INC/RMDEC/2017-18	Rs150,00,000
4	AICTE- Staff Development Programme-Content Based Video Retrieval	AICTE	1-78/RIFD/SDP(191)2011-12	Rs2,00,000
5	CSIR-National Conference On Intelligent Power And Electronics Technology	AICTE	CSIR- SYM/6965/11-HRD	Rs30,000
6	AICTE-Modernisation of Networks Lab	AICTE	8024/RFID/MOD-263(pvt) /policy-111/2011-12 dt.1.3.2012	Rs13,50,000
7	AICTE-Modernistion and upgradation of Power Electronics lab	AICTE	F.NO12/AICTE/RIFD/MOD(POLICY 1)-30-2012-2013	RS 13,48,265
8	AICTE-Entrepreneurship Development Cell	AICTE	F.No.4-46/RIFD/EDC/POLICY-1/2013-14 dated 3/6/13	Rs2,50,000
9	AICTE-Faculty Development Programme "Low Power Design Techniques for ASIC/SOC Chip Development"	AICTE	F.No 6-64/RFID/FDP/P(2)/2013-14 Dated 18/06/2013	Rs4,00,000
10	AICTE-Modernistion and upgradation of Power System lab	AICTE	F.No: 9-/RIFD/MODROB/POLICY-1/2013-14	Rs13,00,000
11	Aicte Sponsored Seminar Grant Programme On IEEE International Conference On Green Computing, Communication And Conservation Of Energy	AICTE	AICTE-F.NO7-278/RIFD/SG(POLICY 1)--2013-2014	Rs2,50,000

12	SERB SEMINAR GRANT PROGRAM , DST IEEE International Conference On Green Computing, Communication And Conservation Of Energy	DST	SERB/F/3727/2013-14	Rs75000
13	AICTE- RECENT TRENDS IN GRID COMPUTING AND ITS USAGE IN BIOINFORMATICS	AICTE	RFID/SEM/ 81/ 2010-11	Rs90000

DST SPONSORED IEDC PROJECTS

1. Performance Enhancement of Automobiles using Thermal Energy From Exhaust-amount sanctioned- Rs1,00,000
2. Hybrd - LP GAS - PETROL GENERATING SYSTEM- Amount sanctioned –Rs 1,80,000
3. I –RING Amount sanctioned-1,00,000
4. Computer Vision based vehicle control using AI-Rs1,00,000
5. Improved Hybrid Air-Zinc Battery for Electric Vehicles-Rs1,00,000

8. Details about Patents & Design Patents

S. No	Name of the Inventor	Title of Invention	Date of Filing	Date of Publish	Patent No (or) Application No	Status of Indian Patents	Status of International Patents
<u>1</u>	Dr.P.Rangarajan	HYBRID LP GAS - PETROL GENERATING SYSTEM	2015		CHALLAN : TR-5 DOCKET NO:14864	Published on line	

PATENT FILED ---HYBRID LP GAS PETROL GENERATING SYSTEM

PATENT OFFICE
INTELLECTUAL PROPERTY BUREAU
U.S.S. Road, Gurgaon, Chennai-600005
Tel No. 044-22500000, 22500001, 22500002, 22500003, 22500004, 22500005
E-mail : Chennai-ipo@ipb.bu.ac.in, rangarajan@ipb.bu.ac.in
Web Site : www.ipb.bu.ac.in

GOVERNMENT OF INDIA

INTELLECTUAL PROPERTY INDIA

Date/Time : 11/03/2015

Agent Number:

CHALLAN : TR-5
DOCKET NO:14864

To:
DR. P. RANGARAJAN
PROFESSOR, EEE DEPARTMENT, RMD ENGINEERING COLLEGE, R.S.M. NAGAR, KAVARAI PETTAI,
GUMMIDIPONDI, TIRUVALLUR, TAMIL NADU - 601206 pr.see@rmd.ac.in, rangarajan@ipb.bu.ac.in

Sr. No.	CBR No.	Reference Number / Application Type	Application Number	Title/Remarks	Amount Paid
1	9148	ORDINARY APPLICATION	236TCHH/2015	HYBRID LP GAS - PETROL GENERATING SYSTEM	8800
2		E-2/14864/2015/ONE	236TCHH/2015	Form 2	0
Total :					8800

Received a sum of Rs. 8800 (Rupees Eight Thousand Eight Hundred only) through

Payment Mode	Bank Name	Cheque/Draft Number	Cheque/Draft Date	Amount in Rs
Cash				8800

Note: This is electronically generated receipt hence no signature required.

CHALLANTR-5 DOCKET NO:14864

To,
 DR. P. RANGARAJAN
 PROFESSOR, EEE DEPARTMENT, RMD ENGINEERING COLLEGE, R.S.M NAGAR, KAVARAIPETTAI, GUMMIDIPOONDI,
 TIRUVALLUR, TAMIL NADU - 601206 prr.eee@rmd.ac.in, rangarajan69@gmail.com

Sr. No.	CBR No.	Reference Number /Application Type	Application Number	Title/Remarks
1	9149	ORDINARY APPLICATION	2367/CHE/2015	HYBRID LP GAS - PETROL GENERATING SYSTEM
2		E-2/1402/2015-CHE	2367/CHE/2015	Form2

9. Research Publications in Journals



Rangarajan Parthasarathy ✓

PROFESSOR, EEE DEPT, RMD ENGINEERING COLLEGE

Verified email at rmd.ac.in

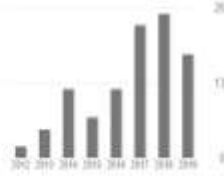
VLSI - SIGNAL PROCESSING

Followers

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	All	Since 2014
Citations	116	97
h-index	6	6
i10-index	2	1



TITLE	CITED BY	YEAR
Brain tumour detection using discrete wavelet transform based medical image fusion UTV Saranya, P Rangarajan BIOMEDICAL RESEARCH-INDIA 20 (2): 889-898	18	2017
A parallel architectural implementation of the New Three-Step Search algorithm for block motion estimation K Sarthi, P Rangarajan, S Sankaranarayanan, V Kankar, V Kulkarni 17th International Conference on VLSI Design: Proceedings., 1671-1676	12	2004
FPGA implementation of high speed architecture for Max Log Map turbo SISO decoder M Mithun, P Rangarajan	12	2009

<https://scholar.google.com/citations?user=En5ugWQAAAAJ&hl=en>



RANGARAJAN PARTHASARATHY

Faculty - computer science, electrical and electronics, RMD Engineering College

Web of Science ResearcherID: V-8888-2018

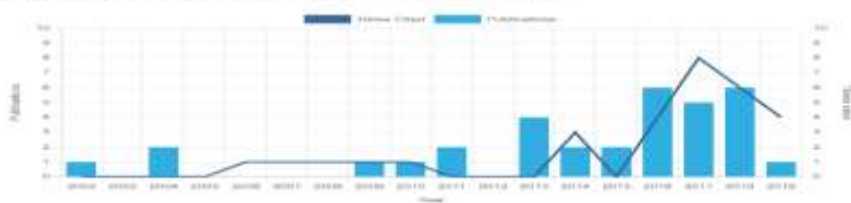
PUBLICATIONS	TOTAL TIMES CITED	H-INDEX
55	30	4

Summary

Metrics

Publications

RANGARAJAN PARTHASARATHY's impact over time



Statistics are calculated based only on information which has been submitted to Publons. Read more about them here.

Publication metrics

PUBLICATIONS ON WEB OF SCIENCE	SOE OR YEARS CITED	H-INDEX	AVERAGE CITATIONS PER YEAR	AVERAGE CITATIONS PER YEAR
19	30	4	1.6	2.1

<https://publons.com/researcher/1660449/rangarajan-parthasarathy/>

S.NO	PUBLICATION TYPE		TOTAL
1.	INTERNATIONAL JOURNALS	45	64
	WEB OF SCIENCE JOURNALS	19	
2.	INTERNATIOANAL CONFERENCE		19
3.	NATIONAL JOURNALS		06
4.	NATIONAL CONFERENCE		06

• RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS - 2019

1. SambasivamRajalakshmi Dr. ParthasarathyRangarajan,**2019**"Investigation Of Modified Multilevel Inverter Topology For Pv System" **Microprocessors and Microsystems**, **Volume 71**, **November 2019**, **102870** <https://doi.org/10.1016/j.micpro.2019.102870> **SCI JOURNAL-Impactfactor-1.045**
2. Radhika, S & Rangarajan, P 2019, 'On Improving The Lifespan Of Wireless Sensor Networks With Fuzzy Based Clustering And Machine Learning Based Data Reduction', *Applied Soft Computing*, Vol. 83, Published Online, July 2019, Issn(1568-4946), Sl.No : 983. **Sci Journal-Impactfactor-4.873**
3. Ilamathi, K & Rangarajan, P 2019, 'Intelligent Computation Techniques For Optimization Of The Shortest Path In An Asynchronous Network-On-Chip', **Cluster Computing**, **22(Suppl 1)**, **335-346**, **January 2019** <https://doi.org/10.1007/S10586-018-1924-6> (Annexure-1) *Sci Journal-Impactfactor-1.851*

RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS - 2018

4. M.S. Kavitha, P. Rangarajan ,2018 , " An optimized reconfigurable algorithm for FPGA architecture oriented IoT applications ", *Cognitive Systems Research* **Volume 52**, December 2018, Pages 335-341 **SCI JOURNAL-Impactfactor-1.384**
<https://www.sciencedirect.com/science/article/pii/S1389041718302705>
5. NS Srivatchan, P Rangarajan,2018," A novel low-cost smart energy meter based on IoT for developing countries micro grids ", *Concurrency and Computation: Practice and Experience* <https://onlinelibrary.wiley.com/doi/abs/10.1002/cpe.5042>, 16 October 2018 **SCI JOURNAL-Impactfactor-1.167**

6. D. Praveena, P. Rangarajan P 2018, "A Machine Learning Application for Reducing the Security Risks in Hybrid Cloud Networks", (Annexure -I) **Multimedia Tools and Applications**, 1-13, July 2018 <https://doi.org/10.1007/s11042-018-6339-0> **SCI JOURNAL-Impactfactor 2.101**

7. Ilamathi, K & Rangarajan, P 2018, 'Determining effective shortest path in asynchronous network-on-chip through bio-inspired optimization techniques', [Wireless Personal Communications](https://doi.org/10.1007/s11277-018-5373-6), 102(4), 3375-3392, October 2018, <https://doi.org/10.1007/s11277-018-5373-6>
8. B. Kalpana, P. Rangarajan, "Real Time Dash Streaming Architecture for Internet of Things using FBM-RWP Model for Medical Videos", *Current Medical Imaging Reviews*, ISSN (1573-4056) Annexure I SL. No :2130
9. B. Kalpana, P. Rangarajan, "An Effective Analysis of MPEG DASH- Dynamic Adaptive Streaming over HTTP, a Streaming Standard for Multimedia", *World Applied Sciences Journal*, Vol. 2, No 35, July 2017, Pg. No 262-269 , ISSN (1818-4952)
10. Sharmila Durai & Rangarajan Parthasarathy, 2017, 'Real Time Implementation of QFT-PUF Architecture for Data Secure System-on- Chip' *Journal of Computational and Theoretical Nanoscience*, Vol. 14, No. 1, pp. 511-516, ISSN (1546-1955) Sl. No: 478. (Annexure-I, Impact Factor: 1.667)
11. Sharmila Durai & Rangarajan Parthasarathy, 2017, 'Medical Data Transmission through PLCC with QFT-PUF Encoder for Data Authentication', *Biomedical Research*, Special Issue, 2017, ISSN (0970-938X), Sl. No: 176, (Annexure-I, Impact Factor: 0.225)
12. J. Jayaudhaya, P. Rangarajan, "Maximum Power Optimization using Flower Pollination Algorithm under partial Shading Condition for Solar Panel", *Journal of Electrical Engineering*, ISSN (1582-4594), Annexure-I, Sl. No :630, Vol. 17, Edition:2

RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS – 2016-2017

13. TJ Mary, P Rangarajan, Delay-dependent Stability Analysis of Microgrid with Constant and Time-varying Communication Delays, *Electric Power Components and Systems* VOL 44 (13), 1441-1452 ,2016 Publisher -Taylor & Francis (Annexure -1)
14. TS Suriya, P Rangarajan, An Improved Fusion Technique for Medical Images Using Discrete Wavelet Transform, *Journal of Medical Imaging and Health Informatics* , Vol. 6(3), Pages 585-597 2016 American Scientific Publishers (annexure -1)
15. Jesintha Mary Thangaiah , Rangarajan Parthasarathy, Delay-dependent stability analysis of power system considering communication delays, *International Transactions on Electrical Energy Systems*.. 2016; 1–13 John Wiley & Sons, Ltd. (annexure -1)
16. S Thanga Ramya, P Rangarajan, V Gomathi, *Journal of Medical Imaging and Health Informatics* 6 (3), 794-801 2016 (annexure)
17. CB Thangammal, D Praveena, P Rangarajan, Secured Data Transmission Using Modified LEHS Algorithm in Wireless Sensor Network, *Circuits and Systems* 7 (08), 1190

2016 Scientific Research Publishing.

18. T Jesintha Mary, P Rangarajan , Design of Robust Controller for LFC of Interconnected Power System Considering Communication Delays Electric Power Components and Systems 44 (13), 1441-1452 2016 Scientific Research Publishing.
19. S Rajalakshmi, P Rangarajan, Analysis of Reduced Switch Topology Multilevel Inverter with Different Pulse Width Modulation Technique and Its Application with DSTATCOM , Circuits and Systems 7 (09), 2410 2016 Scientific Research Publishing
20. .S Radhika, P Rangarajan , A Survey on Energy Based Packet Scheduling Approaches for Wireless Sensor Networks , Middle-East Journal of Scientific Research 24 (8), 2460-2465 ,2016

RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS – 2015-2016

21. S. Thanga Ramya P. Rangarajan, " Suitable Methodologies for key frame extraction from videos", International Journal of Applied Engineering Research, Vol 10, No 31, May 2015, Pg. No 23118-23121 , ISSN(0973-4562) Annexure II SL. No : 8565
22. S. Thanga Ramya, P. Rangarajan, " Fast Video Retrieval from Database with Object Oriented Ant Colony XML Optimization (ACXMLO) for High Resolution Videos", International Journal of Applied Engineering Research, Vol. 10, No 87, December 2015, Pg. No 379-383 , ISSN(0973-4562) Annexure II SL. No : 8565
23. S. Thanga Ramya, P. Rangarajan, " Combined Approach for Object Oriented Medical Video Retrieval using Neural Networks", Journal of Medical Imaging and Health Informatics, ISSN (2156- 7018) Annexure I SL. No : 4966
24. P. Jothibas, and P. Rangarajan, "Spatio and Efficient l1-l1 minimization based Impulse Noise Removal in Gray Images Using Dictionary Learning," IAENG International Journal of Computer Science, vol. 42, no.3, pp160-173, July 2015 . (Annexure-2 –Anna University)
25. P. Jothibas, and P. Rangarajan, "A hetero dictionary learning based noise removal in gray and color images" ,International Journal of Applied Engineering Research Volume 10, Number 11 (2015) pp. 29651- 29679. (Annexure-2 –Anna University)
26. T. Jesintha Mary and P. Rangarajan Delay- Dependent Stability Analysis of Load Frequency Control System Using Rekasius's Substitution and Resultant Theory, International Journal of Applied Engineering Research Volume 10, Number 10 (2015) pp. 25107-25116 (Annexure-2 –Anna University)
27. N.S. Srivatchan and P. Rangarajan, "Control Challenges and Techniques in Islanded Micro

Grid Operation" International Journal of Applied Engineering Research pp. Volume 10, Number 12 (2015) 30883-30900 (Annexure2)

28. S. Rajalakshmi and P. Rangarajan, "Analysis of Voltage Sag Mitigation in Radial Distribution System using STATCOM", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol.10 NO.36,2015, PP.27731-27736 (Annexure-2 –Anna University)
29. S. Rajalakshmi, Dr. P. Rangarajan, D.K. Gowthmai, M.S Kavitha, "Analysis of Multilevel Inverter for STATCOM using Fuzzy controller for Power Factor Improvement", Australian Journal of Basic and Applied Sciences, 9(10) Special 2015, PP.175-186. (Annexure-2 – Anna University)
30. S. Rajalakshmi, Dr. P .Rangarajan, "Harmonic Analysis of Cascaded H Bridge Multilevel Inverter with different Pulse Width Modulation Technique", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol.10 NO.44,2015, PP.30757-30762. (Annexure-2 –Anna University)
31. J. Jayaudhaya and P. Rangarajan, "Comparison of Optimization of Maximum PowerPoint Tracking for PV System", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol.10 NO.44, 2015, PP.30999-31003.(Annexure-2 –Anna University)
32. N. S. Srivatchan, P. Rangarajan, S. Rajalakshmi, Robust PI Controller for Frequency Stabilization of Islanded Microgrid Operation using Battery Energy Storage System, Indian Journal of Science and Technology, Vol. 8(29), 78562, November 2015 ISSN 0974-6846 (Annexure -2)
33. N. S. Srivatchan, P. Rangarajan, S. Rajalakshmi, Control Scheme for Power Quality Improvement in Islanded Microgrid Operation, Procedia Technology Science Direct, Elsevier Volume 21, 2015, Pages 212– 215

RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS – 2014

34. Bennila Thangammal, Rangarajan, Raja Paul Perinbham, "Secured Image Transmission Using Lehs Algorithm In Wireless Sensor Network To Enhance The Network's Lifetime" Comptes Rendus de l'Acad'emie bulgare des Sciences Tome 67, No 10, 2014 (Annexure-1-Anna University)
35. S Veena, P Rangarajan Optimization of Active Apriori Algorithm Using an Effective Genetic Algorithm for the Identification of Top-I Elements in a Peer to Peer Network, Asian Journal of Applied Sciences, Vol 2, No 5, 2014 .(Annexure-2 –Anna University)
36. S Veena, P Rangarajan , "An Efficient Association Rule Mining and Novel Genetic Algorithm for the Identification of Top–L Element" ,Artificial Intelligent Systems and Machine Learning Vol 6,issue 4 pp- 131- 134,2014 . (Annexure-2 –AnnaUniversity)

37. D Praveena, P Rangarajan , "Analysis of Trend, Service and Deployment Models in Cloud Computing with Focus on Hybrid Cloud and its Implementation" Research Journal of Applied Sciences Vol 9, No4, pp 181-186 ,20142014 .(Annexure-2 –Anna University)
38. DR Devi, P Rangarajan, RP Perinbam Power Efficient Cross Diamond Search Architecture for Low Bit Rate Mobile Applications ,International Journal of Soft Computing vol 9,issue, (3), 122-130
39. S Rukmani Devi, P Rangarajan, J Raja Paul Perinbam, Raja Paul .VLSI Implementation of High Performance Optimized Architecture for Video Coding Standards, Acta Polytechnica Hungarica, Vol. 2,issue 6 pp237-249 ,2013 (Annexure-1 – Anna University)
40. J.M. Mathana, Dr. J. Raja Paul Perinbam and Dr. P. Rangarajan" Low complexity Reconfigurable Turbo decoder for wireless communication Systems" Arabian Journal of Science and Engineering October 2013, Volume 38, Issue 10, pp 2649-2662 (Annexure-1 Anna University)
41. T. Blesslin Sheeba, Dr. P. Rangarajan "Area Efficient Cryptographic Ciphers For Resource Constrained Devices" Life science Journal, ISSN: 1097-8135 VOL 10(3)Pages: 1107-1114 June- 2013. (Annexure I)
42. T. Blesslin Sheeba, Dr. P. Rangarajan "A Novel S-Box Design For Hb-2 Against Side ChannelAttack" Journal of Computer Science , ISSN:1549-3636 Volume 10, Issue 9 Pages: 1752-1757 June- 2014 (Annexure II)
43. J. M. Mathana and Parthasarathy Rangarajan , "Reconfigurable architecture for high performance turbo decoder" International Journal of computers and applications, vol.34 issue 3, pp.166-173, 2012, Acta Press Publication (Annexure-2)
44. C. Bennila Thangammal, P. Rangarajan and J. Raja Paul Perinbam Maximization of Wireless Sensor Network's Lifetime using Losningen Cross-layer Approach Asian Journal of Scientific Research Volume 5, Number 3, 133-142, 2012.(Annexure-2)
45. D. Rukmanidevi, P. Rangarajan, J. Raja Paul Perinbam," A Novel Search Algorithm for Variable Block Size Motion Estimation of H.264/AVC. European Journal of Scientific Research ISSN 1450- 216X Vol.81 No.2 (2012),pp.160-167EuroJournals Publishing,Inc.2012.(Annexure-2)
46. D. Rukmani Devi, P. Rangarajan and J. Raja Paul Perinbam," Efficient Architecture for Cross Diamond Search Algorithm for Block Based Motion Estimation", Archives Des Sciences, Vol. 66, No 1. Pp.605-614, 2013. (Annexure-1)
47. J.M. Mathana and Dr. P. Rangarajan, "An Efficient Configurable Architecture for 3GPP

Interleaving/Deinterleaving in Turbo Coded Systems”, European Journal of Science and Research European Journal of Scientific Research Vol. 77 No.1, pp.95-106,2012. Euro Journals Publishing , Inc. 2012 (Annexure-2)

48. “Coarse Grained Reconfigurable Architectures For Motion Estimation In H.264/Avc” D. Rukmani Devi , P. Rangarajan, J. Raja Paul Perinbam, Journal of Theoretical and Applied Information Technology, 31st May 2010. Vol.15. No.2, ISSN: 1817-3195 / E-ISSN: 1992-8615 (Annexure-2)
49. “Fault Tolerant System Design Using Evolvable Hardware”, P. Rangarajan, D. Sharmila Wseas Transaction Of Circuits And Systems , Page No 1687-1691 ,Issue 11,Volume 5, November 2006, ISSN 1109-2734 (Annexure-2)
50. Ilamathi K. and Rangarajan P. Reduction of Substrate Noise from a Digital Block using Asynchronous Technique European Journal of Scientific Research Vol.95 No.2 232-239, Jan 2013
51. D. Rukmani Devi, P. Rangarajan and J. Raja Paul Perinbam, “Performance Evaluation of fast search Block based Motion Estimation Algorithm for low bit rate applications “ Asian Journal of Information Technology (Annexure-2)
52. T. Kalai Chelvi and P. Rangarajan, “Applying Principal Pattern Analysis for Clustering of Categorical Data”, has been accepted for publication in Annexure -1 Archives Des Sciences Journal (ISSN: 1661-464X) Indexed in ISI (Thomson Reuters) Impact factor 0.0474, Published in Volume. 66, Issue 6
53. C Bennila Thangammal, P Rangarajan, J Perinbam“A Double Guard Hill Cipher, Suitable For Wireless Sensor Networks” Journal of Theoretical & Applied Information Technology, Vol. 57 Issue 1, p1-6. 6p. 2013/11/10. (Annexure-2)
54. “FPGA Implementation of High Speed Architecture for Max Log Map Turbo SISO Decoder” J. M. Mathana and P. Rangarajan International Journal of Recent Trends in Engineering (IJRTE) ISSN 1797-9617,Volume 2, Number 6, November 2009,Issue on Electrical & Electronics- Letters
55. T. Kalai Chelvi and P. Rangarajan, “Principal Pattern analysis: A Combined Approach for Dimensionality Reduction with Pattern Categorization”, International Journal Of Computer Applications (0975-8887), Volume 41-No.6, March 2012
56. T. Kalai Chelvi and P. Rangarajan “Criterion based Two Dimensional Protein Folding Using Extended GA”, International Journal Of Soft Computing and Engineering (IJSCE) ,volume -2 Issue -6 January 2013 , ISSN:2231-2307 impact Factor :0.52 Indexed by Google Scholar Papers
57. T. Kalaichelvi and Dr. P. Rangarajan Criterion based Two Dimensional Protein Folding Using Extended GA, International Journal of Computer Science, Engineering and Information Technology (IJCSEIT), Vol.2, No.5, October 2012 pp 65-79

58. T. Kalaichelvi and Dr. P. Rangarajan Principal Pattern Analysis: A Combined Approach for Dimensionality Reduction with Pattern Categorization , , International Journal of Computer Applications (0975 – 8887) Volume 41– No.6, March 2012
59. S. Veena, Dr. P. Rangarajan, A Stride towards developing a distributed system for the identification of top L inner product elements. International Journal of Emerging Technology & Advanced Engineering.Website:www.ijetae.com(ISSN 2250-2459(online),An ISO 9001:2008 Certified Journal, Volume 3, Special Issue 1, January 2013)
60. J.M. Mathana, Dr. P. Rangarajan and Dr. J. Raja Paul Perinbam “VLSI Architecture for high performance 3GPP Interleaver/Deinterleaver for Turbo Codes ”, ID: 833), has been accepted for publication in International Journal of Computer, Communication and Control (IJCCC), 2012
61. S.Thanga Ramya ,P.Rangarajan “ Knowledge Based Methods For Video Data Retrieval International Journal of Computer Science & Information Technology (IJCSIT) Vol. 3, No 5, Oct 2011 pp165-172
62. Analysis of Bloom Filters for Wireless Sensor Network C. Bennila Thangammal, P. Rangarajan and J. Raja Paul Perinban, CiiT International Journal of Wireless Communication November 2010 Print: ISSN 0974 – 9756
63. Reconfigurable Architecture for High Performance Turbo Decoder J.M. Mathana, J. Raja Paul Perinbam and P. Rangarajan, CiiT International Journal of Programmable Device Circuits and Systems November 2010 Print: ISSN 0974 – 973X
64. Fault Tolerant System Design using Evolvable Hardware, P Rangarajan, D Sharmila WSEAS Transactions on Circuits and Systems 5 (11), 1687-1691 2006

- PAPERS PUBLISHED IN NATIONAL JOURNALS

1. T. Kalai Chelvi and P. Rangarajan, “An Efficient Extended GA Technique for Two Dimensional Protein Folding based on Decisive Factor”, Indian Journal of Engineering, Discovery Publications Volume 2, Number 4, February 2013, ISSN 2319-7757, EISSN 2319-7765
2. T. Kalai Chelvi and P. Rangarajan, “Protein Folding Recognition Algorithms –A General survey “,Oriental Journal of Computer Science & Technology, ISSN: 0974-6471, March 2013, Volume-6, No:(1), pgs.71-82
3. T. Blesslin Sheeba, Dr. P. Rangarajan ,” SOC Implementation of Hybrid Cryptography Techniques using Hight and RC4 Algorithm” Research Journal Of Recent Sciences, ISSN 2277-2502 Volume 3, Issue (5) Pages : 65-70 May- 2014
4. T. Blesslin Sheeba, Dr. P. Rangarajan , “A Novel NOC Architecture for SoC based Ultra Lightweight Crypto- Processor Using PRESENT and KATAN Algorithm”, “Research Journal Of Engineering Sciences , ISSN 2278 – 9472 Volume 3, Issue (2), Pages: 6-11 February-2014

5. S Veena, P Rangarajan An Efficient Method To Identify The Most Frequent Item Sets Using Database Count Algorithm And Effective ACO Algorithm In A Peer To Peer Network, International Journal Of Computer Trends And Technology (IJCTT) Page no. 300 – 303 DOI : 10.14445/22312803/IJCTT-V17P153 Volume 17, No. 6, Nov 2014
6. S Veena, P Rangarajan A Stride Towards Developing A Distributed System For The Identification Of Top-L Inner Product Elements International Journal Of Emerging Technology And Advanced Engineering (IJETA) Page no.473 - 476 DOI:10.1.1.414.1078 Volume 3, Special Issue 1, January 2013

PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES

1. S Veena, P Rangarajan "An Efficient Method For The Identification Of Top – L Elements By Using Rapid Apriori Algorithm And ACO Algorithm" IIER-Science Plus International Conference, Kuala Lumpur Malaysia ISBN: 978-93-84209-57-5 Page no. 58 – 61 RWP NO – RWP-18102014-47 18th October 2014
2. T. Blesslin Sheeba Dr. P .Rangarajan “Effective FPGA implementation of ultra-lightweight hummingbird-2 cryptographic algorithm for RFID applications” International Conference On Intelligent Computing Applications (ICICA- 2014) Bharathiar University, Coimbatore ISSN : 2278-1781 Volume-1 Issue-2 Pages: 119-123 March 2014
3. S Veena, P Rangarajan" An Efficient Association Rule Mining And Novel Genetic Algorithm For The Identification Of Top –L Element" ISBN:978-81-924031-3-7 Page no. 63 28th & 29th March 2014
4. T. Blesslin Sheeba Dr. P. Rangarajan “FPGA Implementation of Lightweight Cryptography against Power Analysis Attack” International conference on Computer Engineering Sciences (ICCEMS-2013) Malaysia ISBN:978-967-11414-5-8 Pages: 208-212 December -2013
5. T. Kalai Chelvi and P. Rangarajan, "Analysis of protein folding in E.G.A. ",in IEEE -2013 International conference on Pattern Recognition ,Informatics and Mobile Engineering (PRIME),PRIME 2013,conducted at Periyar University in Salem , February 21-22,978-1-4673-5845-3/13@2013 IEEE
6. T. Kalai Chelvi and P. Rangarajan," Survey on Different High Dimensionality Reduction Techniques" 2nd International Conference on Fuzzy Information and Engineering, ISBN : 978-93-81583-89- 02, 21st April, 2013, conducted by IT Society of India at Coimbatore
7. Low Power Wireless Sensor Networks for Real-time Data Acquisition system using Bloom filter C. Bennila Thangammal P. Rangarajan J. Raja Paul Perinban , PROCEEDINGS OF ICETECT 2011, ISBN: 978-1-4244-7923-8 23-24 March 2011, IEEE conference publications
8. Suresh, T. Rangarajan “Multi-agent based reconfigurable architecture for future wireless networks”, P. IEEE Explorer Digital Library, 01 September 2009, ISBN: 978-1-4244-4710-7

9. P. Rangarajan Design of real time systems for obstacle avoidance for automatic guided mobile Robot “,4th Asian Conference on Industrial Automation and Robotics-ACIAR-2005, IEEE Control and Automation Society, Bangkok, Thailand , May11-13, 2005. Paper Id: F 33,WCC
10. P. Rangarajan “A parallel Architecture implementation of the New Three Step Search Algorithm For Block Motion Estimation”, Proceeding of the17th International IEEE Conference VLSI DESIGN –2004, IIT, Bombay, 7-9, Jan 2004, Page No: 1071, ISBN: 0-7695-2072-3, Publisher-IEEE Computer Society, Washington, DC, USA
11. P. Rangarajan “FPGA Implementation of High Speed Parallel Architecture for Block motion estimation” Signal Processing Systems, 2004, Page No:245-250, ISBN: 0-7803-8504-7, Publisher - IEEE Communications Society, Austin, Texas, USA
12. P. Rangarajan “FPGA Implementation of Two Dimensional Still image processing Using DWT with Distributed arithmetic”, Visualization, imaging and image processing (VIIP 2004, Sept 6-8, 2004, Marbella, Spain, Paper No: 1120
13. P. Rangaraja “HDL Synthesis and Simulation of Eight Bit Dsp based Microcontroller for Image Processing Applications”, n 45th IEEE International Midwest Symposium on Circuits and Systems , Tulsa, Oklahoma, USA, Aug 4-7,2002
14. “HDL Synthesis and simulation of signed sixteen bit Fixed Point High Speed Architecture For Two Dimensional Recursive Filters”, P. Rangarajan Nolta 2002 Symposium, Xian, China
15. “ HDL Synthesis and Simulation of thirty two bit floating point high speed architecture for two dimensional recursive filters” , P. Rangarajan et al, Proceedings of 9th International Workshop on Systems ,Signals and image processing, Manchester ,United Kingdom, 7-8 Nov 2002
16. “HDL synthesis and simulation of sixteen bit DSP based microcontroller for 2-D recursive filter applications “, P. Rangarajan Wseas Conference, Singapore, Dec 2002
17. HDL synthesis and simulation of SLMS Adaptive Filter Algorithm for Echo cancellation of speech band Data Transmission, WSEAS, P. Rangarajan - Asconference, Singapore, Dec 2002
18. “Closed Loop Simulation of HVDC link using PSPICE and implementation using microcontroller 8097 “, , P. Rangarajan Proceeding of international Conference on Evolutionary Computing for computer Communication, Control and power, ECCAP-2000,Chennai
19. “Design Simulation and Implementation of Microcontroller based Laboratory Model of HVDC Simulator”, P. Rangarajan Proceedings of the International Conference on Computer Applications in Electrical EngineeringRecent Advances, University of Roorkee, Roorkee, India. 8-11 Sep 1997

- PAPERS PUBLISHED IN NATIONAL CONFERENCES

1. T. Blesslin Sheeba Dr. P. Rangarajan," SoC Implementation of KLEIN- A Block Cipher Lightweight Cryptography Algorithm" National Conference on Innovations In Information & Communication Technologies (NCIICT- 2014) SCSVM University, Kanchipuram ISBN: 978-81-925639-5-4 Pages: 32-37 January 2014
2. T. Blesslin Sheeba Dr. P. Rangarajan," FPGA Implementation of Secured SIMON Block Cipher against Various Attacks" National Conference on Communication Control and Energy Engineering (NCCCEE-2014) Veltech Dr. RR & Dr.SR Technical University, Chennai ISBN: 978-93-82570-32-5 Pages: 50-54 March-2014
3. T. Kalai Chelvi and P. Rangarajan," Introduction to High Dimensional Data in Data Mining". Proceedings of the National Conference on Computer Science and Informatics – NCCSI'13 17th & 18th April 2013, Anna University Regional Centre, Madurai
4. T. Kalai Chelvi and P. Rangarajan", "Estimating Data Leakage Using Fixed Grid DDM and Digital Watermarking Algorithm" Proceeding of the Eighth National Conference on Advances in Computer Engineering and Networking – ACENET'13, April 10th 2013, pg:257-264, at PSNA College of Engineering and Technology, Dindugul
5. S Veena P Rangarajan "Optimization of Gossip Approach Using Genetic Algorithm for Top-L Element Identification" National Conference on Big Data Analytics and Cyber Security, Hindustan University, ISBN: 978-81-89843-55-7 Page no. 99 - 103 27th & 28th February 2014
6. S Veena P Rangarajan " Identification of Most Frequent Item Set in a Distributed System Using Vertical Data Set Method And Genetic Algorithm"

Ph.D Research Students Guided

S.No.	Student Name	Title of Thesis / Dissertation	supervisor	Year of Award / Expected year of completion
PhD Thesis				
1	Mrs.J.Mathana	Design Of Reconfigurable Architecture For High Performance Turbo Decoders	PRangarajan	2013
2	Mrs .RukmaniDevi	Design And Analysis Of Motion Estimation Algorithm For H.264 Video Coder.		2014
3	MrsT.Kalaichelvi	Performance Analysis On Reduction Of High Dimensional Data Using Extended Genetic Algorithm		2014
4	MrsT.BLESSLIN SHEEBA	Reconfigurable Cryptographic Processor For Resource Constrained Environments		2015
5	Mrs C.Bennila Thangammal	A Cross Layer Approach For Energy Efficient Secured Data Transmission In Wireless Sensor Network		2015
6	MrP.Jothibasu	Sparse Approximation Based Noise Removal Algorithm For Gray And Color Images		2016
7	Mrs S.VEENA	An Efficient Identification Of Most Frequent Data Using Rule Mining And Genetic Algorithm		2016
8	MrsUdhaya Surya TS	An Improved Fusion Techniques For Medical Images Using Discrete Wavelet Transform		2017
9	Mrs,S.Thangaramya	Performance Analysis Of Optimization Techniques For Object Oriented Video Data Retrieval		2017
10	D.Jesindha Mary	Analysis Of Time Delay Effects On The Stability Of Power System		2017
11	Mrs J. Jayaudhaya	Analysis of Power Optimization for PV array under partial shading condition		2018
12	Mrs K. Ilamathi	Multi constraint shortest path optimization using metaheuristic algorithms in asynchronous network on chip		2018
13	Mrs Sharmila.K	Data security through real time implementation of QFT- PUF in PSOC		2018
14	Mrs Kalpana	Improved Bitstream Extraction In Dynamic Adaptive Streaming In Http Using Hybrid Models		2019
15	Mr.N.S.Srivatchan	Power Quality Improvements In An Islanded Microgrid		2019
16	D.Praveena	Mitigating Security Risks In Hybrid Cloud Networks Using Cryptography For Secured Storage		2019

List of Ph.D scholars guiding (on going)

S.No	Name of the Scholar	Reg.No.	Ph.D ./M. S	Supervisor/J	Name of the University	Research Status
1	S.Rajalakshmi RMDEC	1424399173	Ph.D	Power Electronics	Anna University	Confirmation Completed
2	Mrs M.S.kavitha RMKEC	1424499840	Ph.D	Low power VLSI	Anna University	Confirmation Completed
3	S.Radhika RMKEC	1425499226	Ph.D	Wireless Sensor Networks	Anna University	Thesis Submitted
4	Praveen Kumar Reddy RMDEC		Ph.D	VLSI	Anna University	Confirmation Completed
5	D.Rajashekar		Ph.D	Smart Grid	Anna University	Confirmation completed
6	Sumitra		Ph.D	Smart Grid	Anna University	Confirmation completed
7	Vanitha		Ph.D	Smart Grid	Anna University	Course work

10. Text Books (e content) / Monograms / Laboratory Manuals / Chapters developed

S.No.	Academic Year	Name of the Textbook	Useful for
1	2017-18	DISCRETE TIME SYSTEMS AND SIGNAL PROCESSING ISBN-978-93-84608-93-4	BE-EEE , EIE

Conferences, Seminars, Workshops and STTPs Organised

International conference organized

- 1.IEEE International Conference on Signal and Image Processing 2010— Role----- Publishing Chair
- 2.IEEE The International conference on Green Computing, Communication and Conservation of Energy ICGCE-2013 Role -----Conference Chair
3. AICTE sponsored International Conference on Emerging Intelligent Technologies and applications -23rd-25TH October 2019 -ROLE --Conference Chair

NATIONAL CONFERENCE ORGANIZED

1. National Conference on Digital Convergence -2006
-organaising chair ,ECE Department ,RMK ENGINEERING COLLEGE
2. National Conference on. Latest Issues in Information Technology (LIIT-2010)- organaising chair ,IT Department ,RMD ENGINEERING COLLEGE
3. National Conference on Intelligent Power Electronics & Technology (IPET-2011)

organaising chair ,EEE Department ,RMD ENGINEERING COLLEGE (CSIR Sponsored)

4.. National Conference on Intelligent Power Electronics & Technology (IPET-2012)
organaising chair ,EEE Department ,RMD ENGINEERING COLLEGE

5. National Conference On Green Energy (NCGCE 2013)
Conference chair ,EEE Department ,RMD ENGINEERING COLLEGE

NATIONAL SEMINAR / FDP ORGANISED

1.AICTE sponsored- RECENT TRENDS IN GRID COMPUTING AND ITS USAGE IN BIOINFORMATICS ,2010 ,IT Department ,RMD ENGINEERING COLLEGE

2.AICTE sponsored Staff Development Programme-Content Based Video Retrieval,2011
EEE Department ,RMD ENGINEERING COLLEGE

3.AICTE-Faculty Development Programme “Low Power Design Techniques for ASIC/SOC Chip Development 2013, EEE Department ,RMD ENGINEERING COLLEGE

ENGINEERING LABS ESTABLISHED

1.NETWORKS AND WIRELES SENSOR NTEWORKS LAB ,-MODROB SCHEME
IT Department ,RMD ENGINEERING COLLEGE

2.Power Electronics and Special Machines Drives lab - MODROB SCHEME,EEE Department ,
RMD ENGINEERING COLLEGE

3.Power system and switch gear protection lab- MODROB SCHEME,EEE Department , RMD
ENGINEERING COLLEGE

LIST OF ENTREPRENEUSHIP AWARENESS PROGRAMME CONDUCTED (FUNDED BY EDC-AICTE SCHEME) as EDC CO-ORDINATOR

S.No	EAC Number	Dates	Duration	Number of Participant s	Number of Resource Persons
1	EAC #1	13.08.2013 – 16.08.2013)	3 days	108	12
2	EAC #2	19.02.2014 – 21.02.2014	3 days	97	10
3	EAC #3	11.09.2014 – 13.09.2014	3 days	89	10
4	EAC #4	18.02.2015 – 20.02.2015	3 days	67	10
		Total number of participants		361	42

11. Membership in Professional Bodies

MEMBERSHIP OF PROFESSIONAL BODIES		
PROFESSIONAL BODY	TYPE OF MEMBERSHIP	MEMBERSHIP NO
Indian Society for Technical Education, New Delhi	Life Member	LM 17695
IEEE	Senior member	92102766
CSI	Member	N0023102

12. STTPs, Workshops, Seminars and Conferences, etc Attended (Last 3 years).

1. CII- 9th India Innovation Summit, scheduled on 7th & 8th August 2013 at Hotel Vivanta by Taj, at Yeshwantpur
2. CII National Conclave on Operational Excellence 2014 “Operational Excellence for BusinessGrowth & Enhancing Stakeholder Value 10 April 2014: Hotel Hilton: Chennai
3. [CII-10th India Innovation Summit 2014 on 8th and 9th August 2014 at Hotel ITC Gardenia in Bangalore.](#)
- 3 AICTE-National Conclave on Entrepreneurship Education on 19th September, 2014 at Hotel Ashok, Chanakyapuri, New Delhi
- 4 “International Conference on Transnational Entrepreneurs & International SMEs in Emerging Economies: Drivers and Strategies”, at Indian Institute of Management, Bangalore from May20-22, 2015.

- 5 “i2 Academia Research Projects’ Presentation” @ IMTEX (Forming) 2016:
Jan 23-24, 2016, Bangalore International Exhibition Center (BIEC), Bangalore

13. Administrative Responsibilities

1. Entrepreneurship Development cell Co-ordinator
2. IEDC CO-ORDINATOR
3. Rmd ISTE students and Staff Chapter-Secretay
4. Year co-ordinator
5. NBA Co-Ordinator
6. RMD MHRD IIC-Convenor
7. RMD-MSME-BI-Convenor
8. RMD IEEE Stuedent Chapter -CONVENOR

21. SOFT SKILLS

Certification in CISCO Networking (CCNA1,2,3,4), Cisco Networking Academy Trainer
Skills in using router, switches etc

Real time operating System((RTOS) -
Kiel Software ,RTX51, VXWORKS , Embedded C,PIC C Compiler.
Microcontrollers - 8051 , 8096 ,arm processor,
PCB Design - EDWIN XP 1.2 , ORCAD.

Digital Signal Processors - TMS 320 C50 using CODE COMPOSER STUDIO.
ADSP 2181 ,2191, SHARC Processor ,Visual DSP
PSPICE - SCHEMATIC CAPTURE and simulation of analog and digital Circuits .
IC Design and FPGA IMPLEMENTAION using VHDL , VERILOG-XILINX ,ALTERA
,MODELSIM, Mycad, Tanner Tools .
MATLAB - working experience in Signal Processing toolbox, image processing Toolbox
,Communication toolbox.
Magnet Software - electromagnetic simulation-working knowledge