

Faculty Vitae

Name of the Faculty					
Dr.M.SANGEETHA					
Education					
	Degree	Discipline	Institution	Year	
UG	BE	ECE	Periyar Maniammai College of Technology for Women	1996	
PG	ME	Applied Electronics	MGR Engineering College	1999	
PhD	PhD	Embedded System	Anna University	2010	
Academic experience					
	Institution	Title	From	To	FT/PT
	Bharath University	Professor	Nov 2015	Till date	FT
	Karpaga Vinayaga College of Engineering and Technology	Professor	Dec 2010	Nov 2015	FT
	Meenakshi College of Engineering	Assistant Professor	Feb 2008	Dec 2010	FT
	BSA Crescent Engineering College	Senior Lecturer, Lecturer	June 2002	Dec 2007	FT
	Advanced Training Institute for Information Technology	Senior Teaching Assistant	June 2001	May 2002	FT
	Sri Muthu Kumaran Institute of Technology	Senior Lecturer	Feb 2000 to	May 2001	FT
	Raja Rajeshwari Engineering College	Lecturer	June 1996	May 1997	FT
Certifications or professional registrations					
Nil					
Membership in professional organizations					
ISTE					
Honors and awards Nil					
Nil					
Service activities (within and outside of the institution) Nil					
Nil					
List of Publications					
<ul style="list-style-type: none"> ➤ Dr M.Sangeetha(2016), Control construct estimation for partitioned binaries in Codesign System, International Journal of Advanced Research in Innovative Discoveries in Engineering and Applications, 1(27), 22-27 ➤ Vani Rajamanickam and Sangeetha Marikkannan(2016), A New hybrid search algorithm 					

with novel Cross-Diagonal-Hexagon Search Video Coding Algorithm for Block Motion Estimation, *Wireless Personal Communications*, Springer, 88 (2), 211-222.

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- Vani Rajamanickam and Sangeetha Marikkannan(2015), An efficient Motion Estimation Algorithm for Search point reduction in Video Coding, *International Journal of Applied Engineering Research*,10 (33), 26773-26780. Retrieved from www.scopus.com
- Vani Rajamanickam, Sangeetha Marikkannan and Sharmila Ganesan(2015), An Improved Motion Estimation Search Algorithm for H.264/AVC Standard, *ARNP Journal of Engineering and Applied Sciences*, 10(6), pp. 2536-2541.
DOI: http://www.arnpjournals.com/jeas/research_papers/rp_2015/jeas_0415_1792.pdf
- Vani Rajamanickam, Sangeetha Marikkannan, T. Rajavelu, (2015), An Hybrid Motion Estimation Algorithm For Video Coding Standards, *International Journal of Applied Engineering Research*, 10(2) pp. 4885-4894.
- M.Vinoth kumar, J.Gobinath, M.Sangeetha(2014), Realtime distributed wireless sensor network for monitoring smart Agricultural environment, *International journal of Applied Mechanics and Materials*, Vol. 573 pp 388-393.
- R.Vani , P.Davis , M.Sangeetha(2014), Modified Cross Hexagon Diamond Search Algorithm for Fast Block Matching Motion Estimation, *International Journal of Engineering and Technology*, ISSN : 0975-4024, 6 (4), 1737- 1757.
- Vani Rajamanickam, Sangeetha Marikkannan (2017), Efficient Block-based Motion Estimation Architecture using Particle Swarm optimization, *International ARAB Journal of Information Technology* ,13(6A), 732-738.
- R.Vani , M.Sangeetha , P.Davis(2014) , CHDS: A Fast Search Algorithm For Motion Estimation in Video Coding Standards”, *Journal of Theoretical and Applied Information Technology* 65(3),606- 615.
- Sangeetha M., Vani R(2012), Study of Evaluation Metrics in Block-Based Algorithms based on H.264 Video Codec”, in *European Journal of Scientific Research*, 89(2), 249-256.
- Sangeetha M., Rajapaul Perinbam J and Kumaran M(2009), A State Transformation based Partitioning Technique using Dataflow Extraction for Software Binaries, *International Journal of Computer Science and Network Security*, 9(2), 264-273.
- Sangeetha M., Kumaran M, Rajapaul Perinbam J. and. R.Mythili, Hardware-Assisted Simulation and Evaluation of IPCores, *Asian journal of scientific research*, 7(1), 195-199
- Sangeetha M., Manickam P., Rajapaul Perinbam J. and Kumaran M (2006), A Dataflow extraction technique for Hardware/Software Partitioning of Software Binaries, *World Scientific Engineering and Academic Society (WSEAS) Transactions on Electronics*, 3(5), 308-313.
- Dr. Sangeetha Marikkannan , Sanjana Kumari Patel , M.Manoj Kumar Reddy ,R.Sai Varma(2017), *IEEE International Conference On Telecommunication, Power Analysis And Computing Techniques*, Diabetic retinopathy detection using Image Processing
- Dr M.Sangeetha, G.Rahul, M.Rahul and P.Divya Teja (2017), *IEEE International Conference On Telecommunication, Power Analysis And Computing Techniques*, Approximation DCT Architecture for Image Processing High Efficiency Video Coding
- Dr Sangeetha Marikkannan(2017), Hardware Estimator for HDL Language, *IEEE International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies*

- Dinokumar Kongkham, Dr M.Sangeetha and Dr M.Sundarajan(2017) , Hybrid Access Optimization Scheme with energy detector model for MIMO OFDM based Cognitive Radio, IEEE International Conference On Telecommunication, Power Analysis And Computing Techniques
- R.Vani , M.Sangeetha(2012), Survey on H.264 Standard, Second International Conference on advances in Computer Science and Information Technology (CCSIT 2012),397-410
DOI: 10.1007/978-3-642-27317-9
- S.Valarmathi, R.Vani and M.Sangeetha(2012) ,Hardware Software Co-Simulation of Motion Estimation in H.264 Encoder, First International Conference on Information Technology Convergence and Services, 263-272
- Vani Rajamanickam, Sangeetha Marikkannan (2014), Analysis of Motion Estimation in H.264 Video Codec using Search Patterns, International Conference on Electrical, Communication and Computing, 920- 924.
- Vani Rajamanickam, Sangeetha Marikkannan (2014), Survey on Optimization in Motion Estimation for H.264 Video Codec, International Conference on Electrical, Communication and Computing, 994- 998.
- Vani Rajamanickam, P.Davis, Sangeetha Marikkannan(2014), Survey on High Efficiency Video Coding Standard, First International Conference on Knowledge Collaboration in Engineering
- Vani R. and Dr Sangeetha M(2012), Performance Evaluation of Motion Estimation in H.264/AVC Encoder, International Conference on Advances in Computing, Communication and Informatics (ICACCI'12), 1249- 1253
DOI: [10.1145/2345396.2345597](https://doi.org/10.1145/2345396.2345597)
- Vani R. and Dr Sangeetha M(2012), Hardware Software Co-Simulation of Motion Estimation in H.264 Encoder, First International Conference on Information Technology Convergence and Services, 263-272
- Vani, K. Chandramouleeswaran and M. Sangeetha(2011), Hardware/ Software Partitioning usin ARM Processor A Case Study on FIR Filter, International Conference on Biomedical Instrumentation, Engineering & Environmental Management, 147-150.
- S. Valarmathil, R. Vani and M. Sangeetha(2012), Implementation of Motion Estimation in H.264 Encoder Using ARM processor , First International workshop on Signal and Image Processing,
- Vani R. and Dr Sangeetha M(2012), ' Survey on H.264 Standard., The Third International Workshop on Ad Hoc & Ubiquitous Computing
- Sangeetha M., Leelavathi, Udhayasuriyan Kalaiselvi, Kavitha(2011), Implementation of Scheduling and Allocation Algorithm, First International Conference on Advances in Computing and Information Technology, 450-459
- Sangeetha M., Rajapaul Perinbam J. and Kumaran.M(2008), Estimation of control logic for binary synthesis, 2nd International Conference on Signal Processing, Communications and Networking 454 – 457. DOI: [10.1109/ICSCN.2008.4447237](https://doi.org/10.1109/ICSCN.2008.4447237)
- Sangeetha M. and Rajapaul Perinbam J(2007),Optimization of Behavioral Modeling for Codesign of Embedded System, 1st International Conference on Signal Processing, Communications and Networking, 189-194. DOI: [10.1109/ICSCN.2007.350773](https://doi.org/10.1109/ICSCN.2007.350773)
- Sangeetha M., Revathy S. and Rajapaul Perinbam J.(2007), Hardware Estimation and Synthesis for a Codesign system', 1st International Conference on Signal Processing,

Communications and Networking (ICSCN 2007), February 22-24, 2007, pp. 414-419.

- Sangeetha M., Manickam P. and Rajapaul Perinbam J(2006), A Generalized Partitioning Methodology for AI Applications, 3rd International Conference on Artificial Intelligence in Engineering and Technology, Artificial Intelligence Research Group, Universiti Malaysia Sabah, 704-709.
- Sangeetha M., Rajapaul Perinbam J. and Vivek(2005), Hardware/Software Partitioning and Scheduling for a Resource Constrained System, Asia and South Pacific International Conference on Embedded SoCs (ASPICES 2005), held in Indian Institute of Science, Bangalore, during July 5-6, 2005 (poster presentation).
- Sangeetha M., Tharini C., Rajapaul Perinbam J(2004)., Design representation and Transformation for High level Synthesis in Resource Constrained System, 11th IEEE Co-sponsored International Conference on High Performance Computing (HiPC) (poster presentation)
- Sangeetha M., Tharini C. and Rajapaul Perinbam J(2004)., 'Equivalent Design representation and Transformation for High Level Synthesis', 2nd IEEE RTAS Workshop on Model-Driven Embedded Systems (MoDES '04).

Recent professional development activities

- Served as a Co-ordinator for the Faculty Development Training Programme on Signals and System (EC 2204) sponsored by Anna University from June 24th – 30th, 2013
- Served as a Co-ordinator for the Faculty Development Training Programme on VLSI Design (EC 2354) sponsored by Anna University from December 8th – 14th, 2014.
- Lecture on Shanon's theorem and Channel Capacity in Communicational theory (EC2252) Sponsored by Centre for Faculty Development, Anna University, Chennai, December 10th – 16th, 2012
- Lecture on Research, Ethics & Publication at KVCET from June 28th – July 04th, 2012.
- Received certificate of appreciation for coordinating IEEE Conference ICTPACT April 2017
- Received certificate of appreciation for coordinating IEEE Conference ICAMMAET February 2017