FACULTY PROFILE



Name of Teaching Staff / RMK ID	**Dr GNANASEKARAN T/ T0923**		
Designation	Professor		
Department	Electronics and Communication Engineering		
Date of Joining the Institution	16/12/2015		
Qualifications	B.E(ECE),	MS(IT), ME(AE)	Ph.D. (ICE)
Total Experience	Overall: 37 Years	in RMK: 15 Years	
Papers Published in Journal	Overall: 74	After Joining RMK: 65	
List of Papers Published	1. T.Gnanasekaran and K.Duraiswamy "**Modified Soft Output Viterbi Error Correcting Algorithm"** published in IJCSNS International Journal of Computer Science and Network Security VOL.8 No.9, September 2008, PP 161-165. 2. Gnanasekaran T and K.Duraiswamy "**Performance of Unequal Error Protection Using Maximum A- posteriori Probability Algorithm and Modified MAP in Additive White Gaussian Noise and Fading Channel"** published in Journal of Computer Science Volume 4, ISSUE 7, ISSN Print: 1549-3636, ISSN Online: 1552-6607 DOI: 10.3844/jcssp.2008.585.590, 2008, PP 585 - 590. Indexed : Scopus 3. T.Gnanasekaran and K.Duraiswamy "**Application of Scaling factors for MAP and SOVA for Robust Performance in Forward Error Correction"** published in International Journal of Recent Trends in Engineering (Electrical & Electronics), Vol. 1, No. 3, June 2009 pp 47-51. 4. T.Gnanasekaran and Dr.K.Duraiswamy "**Performance of Turbo Codes Using Code Generator [13, 15] and [31, 17] in AWGN and Fading Channel"**, published in International Journal of Recent Trends in Engineering (Electrical & Electronics), Vol. 2, No. 6, November 2009 pp 20-23.		

	5. T.Gnanasekaran, P.Sivaselvi, D.V.Soundari **"Performance of Turbo Decoding Algorithms for Image Transmission Using JSCC"** published in International Journal of Computational Intelligence & Telecommunication Systems, Vol. 2, No.1, January-June 2011, pp27-32. 6. T.Gnanasekaran, T.Kadhambari and K.Kanagasundaram **"Performance of Various Scheduling Algorithms in Mobile WiMAX"** published in CiiT International Journal of High Performance Communication Systems and Networking, Vol. 3, No1, January-June 2011, pp53-58. 7. T.Gnanasekaran and V.Aarthi **"Performance Enhancement of Modified SOVA Decoding Algorithm for Turbo Codes"** published in CiiT International Journal of Networking and Communication Engineering, Print: ISSN 0974 – 9713 & Online: ISSN 0974 – 9616, Vol3, No 4, March 2011. http://www.ciitresearch.org/dl/index.php/nce/article/view/NCE032011013 8. T.Gnanasekaran, K.Thamrairubini, K.Kanagasundaram and Kadhar Nawaz **"Performance Evaluation of QoS for WiMAX Mesh networks using Centralized Scheduling Algorithm"** published in CiiT International Journal of Wireless Communication, Print: ISSN 0974 – 9756 & Online: ISSN 0974 – 9640, March 2011. 9. T.Gnanasekaran and V.Aarthi **"Effect of Constraint Length and Code Rate on the Performance of Enhanced Turbo Codes in AWGN and Rayleigh Fading Channel"** published in WSEAS TRANSACTIONS ON COMMUNICATIONS, Vol.10 issue 5 ISSN: 1109-2742, May 2011,pp 137-146.(AU/Anx II/ 19195), https://dl.acm.org/citation.cfm?id=2037102 http://www.worldses.org/journals/communications/communications-2011.htm http://www.wseas.us/e-library/transactions/communications/2011/53-308.pdf 10. T.Gnanasekaran and V.Aarthi, NS Pradeep **"Performance Enhancement of Modified Turbo Decoding Algorithms for Mobile WIMAX"** published in AJEEE: Australian Journal of Electrical and Electronics, Vol. 9 No 2, ISSN: 1448-837X, October 2012, pp 153-163.

	https://doi.org/10.1080/1448837X.2012.11464319(Annexure 2) https://www.tandfonline.com/doi/abs/10.1080/1448837X.2012.11464319 11. Dr.T.Gnanasekaran, S.Punithashankari, P.Kalyanasundaram, **"Energy Saving In Wireless Sensor Network Using Burst Algorithm"** IOSR Journal of Electronics and Communication Engineering (IOSR-JECE), e-ISSN: 2278-2834, p- ISSN: 2278-8735. Volume 5, Issue 1 (Jan. - Feb. 2013), PP 52-59. 10.9790/2834-0515259 , http://www.iosrjournals.org/iosr-jece/papers/Vol5-Issue1/H0515259.pdf 12. Kavitha S, Dr.Varghese Paul, Dr.T.Gnanasekaran, **"Color Face Recognition using Texture Features and Fractional Fourier Transforms"** International Journal of Scientific & Engineering Research, Volume 4, Issue 8, August 2013 ISSN 2229-5518. (Annexure 2) 13. Kalyanasundaram.P, Priyadharshini.M, Dr.Gnanasekaran.T**,"The Unceasing Detection of Adjoining Nodes, Its Connectivity, Weakness Impact on Wireless Sensor Networks and Actor Networks"**, International Journal of Innovative Research in Science, Engineering and Technology, Vol.3, Special Issue 1, February 2014.,PP 1346-1362. http://www.ijirset.com/upload/2014/icets/134_EC353.pdf 14. T.D.Subash, Dr.T.Gnanasekaran, J.Jagannathan, C.Divya, **"Relative Analysis of GaAs, InSb, InP Using QWFET"**, International Journals of Advanced Materials Research. Vol 984-985(June 2014) pp 1080-1084. https://doi.org/10.4028/www.scientific.net/AMR.984-985.1080 15. T.D.Subash ,T.Gnanasekaran,J.C. Divya and J.Jagannathan, **"Design and Simulated Characteristics of Nanosized InSb Based Heterostructure Devices"** Advances in Materials Science and Engineering, Volume 2014(August), Article ID 196732, 5 pages, http://dx.doi.org/10.1155/2014/196732. http://www.hindawi.com/journals/amse/2014/196732/ 16. T.D.Subash ,T.Gnanasekaran, **"Indium antimonide based HEMT for RF applications"** Journal of Semiconductors, Vol. 35, No. 11, November 2014, © 2014 Chinese Institute of Electronics.DOI:10.1088/1674-4926/35/11/113004,

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	m=email&utm_content=AA_en_06082018&ArticleAuthorContributingOnlineFirst_20190728, Indexing: SCOPUS and SCI 47. Priya B, Gnanasekaran T , **"To optimize load of hybrid P2P cloud data-center using efficient load optimization and resource minimization algorithm".** The journal Peer-to-Peer Networking and Applications (Springer Science+Business Media, LLC, part of Springer Nature 2019), **ISSN 1936-6442 (Print) ISSN: 1936-6450 (electronic version)** DOI https://doi.org/10.1007/s12083-019-00795-3, Anna University Journal Reference Number: 9254, Indexing: SCOPUS and SCI 48. SANTHOSH KRISHNA B V, GNANASEKARAN T, "**Retinal Vessel Extraction Framework Using Modified Adaboost Extreme Learning Machine**" Journal of Computers, Materials & Continua CMC, Vol.60, no.3, pp.855-869, August 2019. CMC. doi:10.32604/cmc.2019.07585, www.techscience.com/cmc Annexure 1, Indexing: SCOPUS and SCI. 49. J. M. Nandhini, T. Gnanasekaran, **"Enhanced fault identification and optimal task prediction (EFIOTP) algorithm during multi-resource utilization in cloud-based knowledge and personal computing".** The journal Personal and Ubiquitous Computing(Springer Nature), **ISSN: ISSN 1617-4909 (**DOI https://doi.org/10.1007/s00779-019-01265-6 50. Chairma Lakshmi K.R, Gnanasekaran T, "**Border Alert and Life Projection System for Fishermen**" Journal of Advanced Engineering Research ISSN: 2393-8447 Volume 6, Issue 1, 2019, pp.10-15. https://dl.jaeronline.com/papers/vol06issue012019/03_JAER_V6N1.pdf 51. B. Priya and T. Gnanasekaran, "**A Comprehensive Study on the Load Assessment Techniques in Cloud Data Center**" in Springer Nature Switzerland AG 2020, New Trends in Computational Vision and Bio-inspired Computing, https://doi.org/10.1007/978-3-030-41862-5_19 (Scopus and Web of Science Indexed). pp 207-214 52. B. Praveena, K.R. Chairma lakshmi, Dr. T. Gnanasekaran, K. Srinidhi, "**Monitoring Of Transformer And Generator Using**

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73. N. Yuvaraj, Gnanasekaran Thangavel, T. Yugavendhan, S. Vishnuvardhan, D Sindhu Mudaliyar, M. Yoshitha & A. Sharmila (2026). “A Deep Learning-Driven Decision Support System for Real-Time Crop Disease Management”. In: Joshi, A., Ragel, R.G., S., K. (eds) ICT: Applications and Social Interfaces. ICTCS 2025. Lecture Notes in Networks and Systems, vol 1876.

	Springer, Cham. https://doi.org/10.1007/978-3-032-19690-3_11 . April 2026 74. B. Priya, J. M. Nandhini, S. Gurusubramani, and Gnanasekaran Thangavel, "SnO2 Nanostructure Applied as Gas Sensors with Reinforcement Learning for the Categorization of Greenhouse Gases. JOURNAL OF SEMICONDUCTOR TECHNOLOGY AND SCIENCE, Print ISSN 1598-1657, E ISSN 2233-4866 , https://doi.org/10.5573/JSTS.2026.26.5.351. August 2026 PP351- 363

Papers Presented in Conferences (Scopus / WoS indexed only)	Overall:60	After Joining RMK: 50
Ph.Ds. / Projects Guided	Ph.Ds. Guided:07	Student Projects Guided: 68

Books Published:

Count: 09

Sl No	Title of the book	Authors	Publisher		Y Pub
1	Multimedia Compression Techniques / Communication https://booksdelivery.com/multimedia-compression-techniques-by-santhosh-krishna-from-ars-publications	B.V Santhosh Krishna T.Gnanasekaran J.Jijin Godwin	A R S Publication Chennai		
2	Wireless Networks	B.V Santhosh Krishna T.Gnanasekaran	A R Publication Chennai		
3	Opto Electronic Devices	T.Gnanasekaran B.V Santhosh Krishna Narender Malisherry	A R Publication Chennai		
4	Communication Engineering https://arspublications.com/product/communication-engineering/	T.Gnanasekaran B.V Santhosh Krishna J.JIJIN GODWIN	A R S Publication Chennai		
5	Wireless Networks	T.Gnanasekaran B.V Santhosh Krishna	A R S Publication Chennai		

	https://arspublications.com/product/wireless-networks/				
6	Wireless Communication https://arspublications.com/product/792/	T.Gnanasekaran B.V Santhosh Krishna	A R S Publication Chennai		
7	Networks and Security	B.V Santhosh Krishna T.Gnanasekaran	A R S Publication Chennai		
8	MICROCONTROLLER AND EMBEDDED SYSTEM https://www.flipkart.com/product/p/itme?pid=9789357625623	Dr. K. R. Chairmalakshmi, Dr. Gnanasekaran Dr. N. Padmavathi, Mr. Hariharan	Alpha International		A
9	Data Science and Machine Learning using Python https://www.flipkart.com/product/p/itme?pid=9789366744162	Dr. K. R. Chairma Laskshmi Dr.Gnanasekaran Thangavel, S. Selvalakshmi Dr. N. Golden Stepha	Scientific International Publishing House		M

Patents

Published Count:10 | Granted Count:04

Sl. No.	Name of the Inventors	Title	Application no. &patent filed Date	Current Status
1.	1. Dr.S.Vijayalakshmi 2. Dr.T.Gnanasekaran 3. Yogalakshmi. K 4. SakalaVishaliSakunthala 5. P. Srilatha	Design of Compressor Less Water Chiller and Heater	201741022392 27/06/2017	**Granted Patent No. 371884 Date of Grant: 14.07.2021**
2.	1. K.R. Chairma Lakshmi 2. Dr. T. Gnanasekaran 3. H.JayaprakashB. Giridhar 4. N.K.Dhanasekar 5. D.Dinesh Kumar	Border Alert and Life Protection System for Fishermen	201741022591 28/06/2017	**Granted Patent No. 389281 Date of Grant: 15.02.2022**
3.	1. J. Bharath Singh 2. Dr.T.Gnanasekaran	Buddy StickFor Challenged	201841049954	Application Published

	3. R. Rathi 4. R. Sobana 5. K. Swarna Priya	PeopleWith Bus Identification	31/12/2018	03/07/2020
4.	1. Aparna M 2. DivyaNachiar R 3. Akalya A 4. Chairma Lakshmi K R 5. Gnanasekaran T	Smart Waste Management Using Credit Fetcher	201941049420 02/12/2019	**Granted Patent No. 508793 Date of Grant: 08.02.2024**
5.	1. Mr.K. Vijayanand 2. Dr.T.Gnanasekaran	Catalytic Converter Efficiency Monitoring System	202041045390 19/10/2020	Published 22/04/2022
6.	1. Dr. K.A. Mohamed Junaid 2. Mr. G. Marimuthu 3. Dr.T.Gnanasekaran	Smart On/Off Controller	202041044204 & 10/10/2020	Published 15/04/2022
7.	Dr.T.Gnanasekaran	360O Cradle Sitter – A Toddler Monitoring System For Smart Cradle Using IoT And AI	202141006077 19/02/2021	Application Published 19/02/2021
8.	1.Dr.N.M. JothiSwaroopan 2.Dr.T.Gnanasekaran 3.Ms.B. Praveena 4.Ms J Sandhiya. 5.Ms D.G Shakthipriya 6.Ms K Sangavi	Automatic Access Control system using Deep Learning for COVID-19	202141029941 03.07.2021	**Awaiting Request for Examination 06/01/2023**
9.	Mr.K Vijay Anand Mr. Prabhu U Ms. N. Nirmitha Mr. Lokamithran Mr. Mohammed Hasim Dr. K. A. Mohamed Junaid Dr.T. Ganesekaran	Mini Robot for Medication adherence and monitoring for elderly Covid prevention by detecting mask and maintaining the social distance	202141059517 20/12/2021	**Granted Patent No. 523592 Date of Grant: 28.10.2024**

10.	Mr.K Vijay Anand A. Anto Nobel M. Arun Kumar Dr. K. A. Mohamed Junaid Dr.T. Ganesekaran	AI Based Image Processing System for Tracking and Monitoring the Health and status of Animals	202141059519 20/12/2021	Published & Exam Fee paid 04/02/2022
11.	Mr.Gopalakrishnan. A Mr.Tharun Kumar. A Mr.Thilak. S.M. Ms.Priyadharshini Ms.Pravaeena Dr.N.M. Jothi Swaroopan Dr. T.Ganesekartan	AFFORDABLE UAV FERTILIZER DISTRIBUTOR	202241019808 31/03/2022	Published & Exam Fee paid 13/05/2022
12.	Ms.S.Bhoommikha Ms.K.Kaviya Ms.Selvalakshmi Ms.Prvaeena Mr.J.Barath Singh Dr.N.M. Jothi Swaroopan Dr. T.Ganesekartan	ANTI-SNOOZE DEVICE	202241019807 31/03/2022	Published & Exam Fee paid 13/05/2022
13.	1.N M Jothi Swaroopan 2.Dr. T. Gnanasekaran 3.K.R.Chairma Lakshmi	IMPLEMENTATION OF REAL-TIME CHATBOT HARDWARE USINGANDROID	202341077848 16/11/2023	Published on 22.12.2023
14.	Dr. T. Gnanasekaran	Device for ATM Card for Multiple Bank Accounts	202441022999 23.03.2024	Published on 29.03.2024

Professional Memberships

Count:14

SL No	Name of the Society	Affiliation	Details of Membership Number
1	The Institution of Electronics & Telecommunication Engineers (IETE)	Fellow	F-505351
2	Institute of Electrical and Electronics Engineers(EEEE)	Senior IEEE Member	#92814378
3	Institution of Engineers(India) IEI	MIE	M /122327/ 5
4	Indian Society for Technical Education (ISTE)	LM	LM 34877
5	Instrumentation Society of India (ISOI)	LM	2454

	6	Indian Society of System for Science and Engineering (ISSE)	LM	6595
	7	Association of computer Electronics and Electrical Engineers(ACEEE)	M	7000154
	8	Institute of Doctors Engineers and Scientists(IDES)	M	1011
	9	The Institute of Engineering and Technology(IET)	MIET	1100276680
	10	Computer Science Teacher Association(CSTA)	M	6756024
	11	Institute of Research Engineers and Doctors (IRED)	Fellow	-
	12	Association for Computing Machinery (ACM)	M	6756024
	13	International Society for Research and Development (ISRD)	Fellow	F3140900259
	14	International Association of Engineers (IAENG)	LM	64198

Consultancy Projects Completed	Count:05
Awards Received	Count: 04 ➢ Awarded **DISTINGUISHED ALUMNI AWARD** for achievement in Academics and Research from Vellore Institute of Technology (VIT) during VITAA Day, 26th January 2014**.** ➢ Awarded **Best Faculty Award** by Cognizant for year 2017-18. ➢ Awarded **Best Faculty Advisor Award** by IEI in 2024 ➢ Awarded **Best Faculty Advisor Award** by IEI in 2025
Research grants Received	

Sl No	**Title**	**Category**	**Funding Agency**	**Amount in Rs**
1	National Seminar on **"Recent trends in Broadband Wireless Technology"-** Two days (16 March 2007 – 17 March 2007), Department of Electronics and Communication, Bannari Amman	National Seminar	All India Council for Technical Education, New Delhi AICTE File No.: 1-4/FD/SEM(173)/2006-07, dated 1/2/2007	75000

	Institute of Technology, Sathyamangalam			
2	Faculty Development Programme on **"Web Technologies"** 5 days 3rd June 2013 to 7th June 2013	ISTE-SRM FDP	ISTE-SRM Indian Society for Technical Education, New Delhi ISTE-SRM/STTP-Information Technology/C-33/2012-13	100000
3	National Seminar on **"Recent trends in Broadband Wireless Technology"** 2 days 16th and 17th December 2013	AICTE	All India Council for Technical Education, New Delhi AICTE File No.: 7-245/RFID/SG/POLICY-1/2013-14, dated July 29,2013	50000
4	Modernization and Removal of Obsolescence For Establishment of Laboratory For Testing And Calibration of Industrial Instruments	ATCTE	All India Council for Technical Education, New Delhi Ref.:F.No: 9-165 / RIFD / MOD / Policy-1 / 2018-19 dated 03.12.2019 .	800000
5	Enhancing accessibility and independence for visually impaired using computer vision	MSME MSME Idea Hackathon 3.0	Sanction order No. 17(2)/MSME/Innovative/PMAC/2021-22 dated –	1500000

	<table><tr><td></td><td></td><td></td><td>14/03/2024</td><td></td></tr><tr><td>6</td><td>2026 IEEE HTB Tech4Good Project “IoT-Enabled Smart Odor-Control System for Sustainable Fish Drying in Coastal Tamil Nadu”</td><td>IEEE International Funding</td><td>HTB Tech4Good Project 26-T4G-042</td><td>US $7,510. =718418</td></tr><tr><td></td><td colspan="3">Total</td><td>25968418</td></tr></table>
Orchid Link / ID	https://orcid.org/0000-0003-4005-6482
Google Scholar Link / ID	https://scholar.google.com/citations?hl=en&user=qCoBNuMAAAAJ
Vidwan Link / ID	https://vidwan.inflibnet.ac.in/profile/305196
Research Gate Link / ID	https://www.researchgate.net/profile/Gnanasekaran_Thangavel
Scopus Link / ID	https://www.scopus.com/authid/detail.uri?authorId=56366454300