


## FACULTY PROFILE

<b>Name of Teaching Staff / RMK ID</b>	Dr R GOMALAVALLI /T1214			
<b>Designation</b>	ASSOCIATE PROFESSOR			
<b>Department</b>	Electronics and Communication Engineering			
<b>Date of Joining the Institution</b>	31.12.2025			
<b>Qualifications</b>	B.E.(ECE)	M.E.(Medical Electronics)	Ph.D (Medical Image Processing)	
<b>Total Experience</b>	Overall: 16 Years		in RMK: 4 Month	
<b>Papers Published in Journal</b>	Overall: 37		After Joining RMK: Under Review-5	
<b>List of Papers Published</b>	<p>1.R Gomalavalli (2025),” Deep Learning-Based Segmentation System for Renal Tumors Gomalavalli R, Veera Boopathy E, Hema J, International Research Journal of Multidisciplinary Scope.</p> <p>2. R Gomalavalli (2024),”Integrating Deep Learning into VLSI Technology: Challenges and Opportunities” E., Veera Boopathy, E., C., Sasikala, C., L., Vigneash, L., R., Gomalavalli, R., K., Rajeshwaran, K.International Research Journal of Multidisciplinary Scope, 2024. Page3of2</p> <p>3. R Gomalavalli (2024) “Efficient Power Management in Multicore Systems using Distributed On-Chip Switched-Capacitor Converters with DVFS” IEEE Conference 2024.</p> <p>4. R Gomalavalli (2024) “ Permittivity Measurement of Edible Food Materials: A Review Paper” has got published in Material science and Technology vol.3Issue No.01 .</p> <p>5. R Gomalavalli (2024) “Hand Gesture System for Physically Challenged People” has got Published in International Journal of Scientific Research n Science and Technology Volume.11,Issue no.11.IMF =8.62.</p> <p>6. R Gomalavalli (2023) “Clinical Application of Neural Network for Cancer Detection Application” has got Published in AIHC, Springer to Published.</p> <p>7. R Gomalavalli, (2022 ) “Comparison of Transient Responses of Two Switch forward converter with sliding mode controller and HC-Fuzzy controller.” publication in GS Journal Volume 10, Issue 1.</p> <p>8. K Kishore kanna , R Gomalavalli, C .priya, , P Satheshlingam (2023) “Detection Of Mental Fatigue In Drivers Using EEG Applications “Journal of Data Acquisitionand processing, has got acceptance in the Year 2023.</p> <p>9. R Gomalavalli, G Pavan, G Ramyasri, P Niranjana, R Naveen,K.Prathyusha (2022), Automatic Pothole Detection and Uploading Data to Cloud Servers,IOSR,ISSN: 2278-2834 Vol 17,Issue</p>			

02.

10. R,Gomalavalli , ( 2022), ,Quick analysis of Quality of Cereals,Oil seeds and 11. pulses using AI , IOSR,ISSN: 2278-2834 Vol 17,Issue 02.

11. Kanna, R. Kishore and Devi, K. Yamuna and Dhivya, A .Josephin Arockia and Amutha, Priya. M Diana and Gomalavalli, R and Ambikapathy, A. (2022) *Software Development Framework for Cardiac Disease Prediction Using Machine Learning Applications*. In: 2022 IEEE International Conference on Current Development in Engineering and Technology (CCET), Bhopal, India.

12. R Gomalavalli , ( 2021),A High-Performance MAC Unit by Integrating Additions and Accumulations into PPR Process, , International journal of Innovative Research in science, Engineering and Technology in IJRSET, Volume 10, Issue 7.

13. R. Gomalavalli, ( 2021),Design and Development of Agri-Bot for Seeding, Watering and Ploughing, International journal of Innovative Research in science, Engineering and Technology in IJRSET, Volume 10, Issue 7.

14. .R. Gomalavalli, N. Kripa, Oinam Robita Chanu (2021 ) Modern Dehydration Detecting and Alerting System for Pregnant Women, International Journal of Aquatic Science ISSN: 2008-8019 Vol 12, Issue 03,pg no.53-57.

15. R. Gomalavalli, ( 2021),Object Detection Deep Learning International journal of Advances in Engineering and Management (IJAEM), Volume 3, Issue 7.PP: 2991-2994.

16. R. Kishore Kanna, N. Kripa, Dr R. Gomalavalli. (2021). Brain Tumour Detection & Classification Using Neural Network Algorithm Application. International Journal of Modern Agriculture, 10(2), 3046 - 3054.

17. R. Kishore Kanna, N. Kripa, Dr R. Gomalavalli. (2021). Advanced Precautionary & Smart Alert System For Contagious Diseases Using Microcontroller Applications IJCRT Volume 9, Issue 3 March 2021 ISSN: 2320-2882/

19. R.KishoreKanna,N.Kripa,R.Gomalavalli(2021), Comparison of Electroencephalography Waveform Before and After Modified Therapy, Drugs and Cell Therapies in Hematology,(ISSN: 2281-4876) Volume 10 Issue 1, pg.no.1148-1152.

20. Gomalavalli R, BB Kishore,(2020Low-cost Portable Heart Rate Monitoring Module ,(2021), Design Engineering, ISSN: 0011-9342,Pg.no. 16807-16811.

21. Gomalavalli, R, Venkata Sai, PM, Sriram, K, Muttan, S (2018) Female Cancer Control Diagnosis by Decision Making using Image Processing - A Prospective Study", International Journal of Science and Research, vol. 7, Issue 1 (Scopus / Impact Factor 6.391).

22. Gomalavalli, R, Muttan, S, Venkatasai, PM, Sriram, K (2017) Feature extraction by gray level co occurrence matrices parameters in computed tomography of renal cell carcinoma. International Journal of Applied Research in Science and Engineering Technology. (UGC Approved journal /Impact factor 6.887).

23. Gomalavalli, R, Sriram, K, Muttan, S, Venkatasai, PM (2017) Texture analysis of computed tomography images of kidney by active contour method: a novel method for assessment of primary solid renal mass heterogeneity - A prospective study. Journal of Clinical and Diagnostic Research (PubMed& Scopus).

24. Gomalavalli, R, Muttan, S, Venkatasai, PM, Sriram, K (2017) Feature Extraction of kidney Tumor implemented with Fuzzy Inference System", International journal of applied research in

	<p>Science and Engineering Technology – (UGC Approved journal / Impact factor 6.887).</p> <p>25. Gomalavalli, R, Muttan, S, Venkatasai, PM, Sriram, K (2017) Feature extraction of male renal cell malignant. Biomedical Research. (Scopus/ Impact factor). Page4of2</p> <p>26. Gomalavalli, R, Muttan, S, Venkatasai, PM (2016) Determination of dice coefficient of diseased renal images. IOSR Journal of Electronics and Communication Engineering, Vol.11, Issue 1, pp. 37-44. (Scopus/ Impact factor 3.2).</p> <p>27. Gomalavalli, R, Muttan, S &amp; Venkatasai, PM (2016) Boundary detection of renal using contour segmentation. International Journal of Biomedical Engineering and Technology. (Scopus / Impact Factor 2.1 ).</p> <p>28. Gomalavalli, R, Muttan, S, Jagadeesan, SK, Chandrasekar, G (2012) Design and development of noninvasive method of functional Thyroidism classification. Journal of International Medical Science Academy. (Scopus/ Impact factor 1.6).</p>	
<b>Papers Presented in Conferences</b> (Scopus / WoS indexed only)	Overall :15	After Joining RMK :-Under Process
<b>Ph.Ds. / Projects Guided</b>	Ph.Ds. Guided:Nil	Student Projects Guided: 24
<b>Books Published:</b>	Count: 2	
	<p>1.DIGITAL PRINCIPLES &amp; SYSTEM DESIGN, Dr R Gomalavalli ,Dr K Yamuna Devi,J Hema has published book Year 2023,DOI:ISBN-13:978-93-5577-67-5.</p> <p>2.WEB 3.0 ARCHITECTING THE FUTURE OF DECENTRALIZED INTELLIGENCE HAS PUBLISHED THE BOOK 05.05.2026 DOI: ISBN 978-81-972100-5-1</p>	
<b>Patents</b>	Published Count :7	Design Granted Count :1
	<p><b>PUBLISHED ARTICLE:</b></p> <p>1.Title Of The Invention: Mobile Application Based IOT System For Overhead Water Tank Maintenance, Application No.202141046162 A 2021</p> <p>2. Title Of The Invention: Electric Power Distribution Employing Ensemble Machine Learning Based Cyber-Physical System, Application No.202241006399 A 2021</p> <p>3. Title Of The Invention: Machine Learning Based Heat Signature Signal Processing System Employing Radiometer Array, Application No. 202241008171. April 2022</p> <p>4. Title Of The Invention: Temperature Sensing and Displaying Face Mask Casing, Design patent for Grant Application No. 369767-001. – August 2022</p> <p>5. Title Of The Invention: Implementation of surveillance monitoring using ESP32-CAM Module Application No. 202241065882A - Nov 2022.</p> <p>6. Title Of The Invention: Design And Implentation Of A Smart Network Using LORA for measuring environment parameters,</p>	

	<p>Application No. 202241065883A- Nov 2022.  7. Title Of The Invention: Design And Android Chabot Application Using Artificial Intelligence System Application No. 202241065881A- 25 th Nov 2022.</p> <p><b>DESIGN GRANT:</b>  1. Title :BIOSENSOR BASED DEVICE FOR DETECTION OF CANCER CELLS, Design No. : 454535-001,07/04/2025</p>
<b>Professional Memberships</b>	Count :4
	<p>ISTE LM 77450  IEEE- Member Number:100673242  IAENG - Member Number: 322358  IAAC-FRT JOC-CE000067</p>

<b>Consultancy Projects Completed</b>	Count :Under Process-1
<b>Awards Received</b>	Count :- 2
	<p>1.Got Best paper award in the CRESEARCH-2021. AVIT  2. In JNTUA Ratified as a Assistant Professor-2023</p>
<b>Research grants Received</b>	Nil
<b>Orchid Link / ID</b>	<a href="https://orcid.org/0000-0003-2168-167X">https://orcid.org/0000-0003-2168-167X</a>
<b>Google Scholar Link / ID</b>	<a href="https://scholar.google.co.in/citations?user=9PWV7tkAAAAJ">https://scholar.google.co.in/citations?user=9PWV7tkAAAAJ</a>
<b>Vidwan Link / ID</b>	<a href="https://vidwan.inflibnet.ac.in/profile/297303">https://vidwan.inflibnet.ac.in/profile/297303</a>
<b>Research Gate Link / ID</b>	<b>Researcher Id</b> <a href="https://www.researchgate.net/profile/AAI-8751-2021">AAI-8751-2021</a>
<b>Scopus Link / ID</b>	<a href="https://www.scopus.com/authid/detail.uri?authorId=55325685100">https://www.scopus.com/authid/detail.uri?authorId=55325685100</a>

