




SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution| Accredited with 'A++' Grade by NAAC)

Pulloor, Kariapatti –Taluk. Virudhunagar Dist-626115.



Department of Electronics and Communication Engineering					
Name	T.RUBA				
Date of Birth	19.10.1990				
Unique ID	1-7473120375				
Educational Qualifications	B.E (ECE) ,M.E. (AE)				
Designation	ASSISTANT PROFESSOR				
Email ID	ruba@sethu.ac.in				
Alternate Email ID	rubasuresh20@gmail.com				
Experience	Industry	Teaching	Others	Total	
	--	9 years and 6 months	--	9 years and 6 months	
Date of Joining the Institution	03-03-2021				
Area of Specialization	Biomedical signal & Image processing				
Courses taught	Digital Image Processing, Electronic Devices, Microprocessors and Microcontrollers, Electronic circuits, Digital Electronics, IoT, Computer Networks				
Research Focus	Digital Image Processing Biomedical Engineering Electronics and Communication IoT				
Research guidance (Number of Scholars)	--				
Subject Competency	Digital Image Processing, Electronic Devices, Microprocessors and Microcontrollers, Electronic circuits, Digital Electronics, IoT, Computer Networks				
No. of papers published	National Journals		International Journals	Conferences	
			8	International: 12 National:2	
PG Specialization	Applied Electronics				
Ph.D. Specialization	Medical Image Processing				
Projects Carried out	1. Accurate Classification and Detection of Brain Cancer Cells in MRI And CT Images Using Nanocontrast Agents(IEI) 2. SHE – A Wearable Smart Shoe for Women Safety (EDII) 3. Portable Kashaya Making Machine (EDII)				



	4. IoT Based Smart Aquaculture System (EDII) 5. IoT Based Smart Tomato Storage System(Ministry of Food and Consumer affairs) 6. Tomato Grading (Naan Mudhalvan 1.0, Niral Thiruvizha) 7. GrowSmart (Naan Mudhalvan 2.0, Niral Thiruvizha) 8. Poultry farming (Naan Mudhalvan 2.0, Niral Thiruvizha) 9. SHE – A Wearable Smart Shoe for Women Safety(MSME 4.0)
Patents (Filed & Granted)	Published
Technology Transfer	Published-1 / Filed-1
No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	--

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Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	B.E	ECE	Anna University	2012
PG	M.E	Applied Electronics	Anna University	2015
Ph.D		Medical Image Processing	Anna University	2025

Details of Journal Publication:

1. Published a paper titled “Brain tumor segmentation in multimodal MRI images using novel LSIS operator and deep learning”, in Journal of Ambient Intelligence and Humanized Computing 14 (10), 13163-13177
2. Published a paper titled “ Brain tumor segmentation using JGate-AttResUNet–A novel deep learning approach”, Biomedical Signal Processing and Control 84, 104926
3. Published a paper titled “Accurate Classification and Detection of Brain Cancer Cells in MRI and CT Images Using Nano Contrast Agents” in Biomedical and Pharmacology Journal, Volume 13 , Issue 3 , 2020. **(Scopus)**
4. Published a paper titled “Performance Analysis of Various Nanocontrast Agents and

CAD

Systems for Cancer Diagnosis” in Current Medical Imaging, Volume 15 , Issue 9 , 2019.

(Annexure I).

5. Published a paper titled “Brain Tumor Segmentation in MRI images Using Deep Learning –

A Review” in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 8, Issue 9, September 2019.

6. Published a paper titled “Radioprotectors and radiosensitizers for effective radiotherapy treatment”, in Asian Journal of Applied Science and Technology, vol.2, issue1, Jan 2018.

7. Published a paper titled “Detection of Fetal Stress from Maternal Abdominal ECG”, in International Journal of Computer Sciences and Engineering, vol.6, Special issue 4, May 2018.

Details of Conference attended:

INTERNATIONAL:

1. Presented a paper titled “ Hierarchical Network for Brain Tumor Classification and Segmentation”, in ICETET’20 held at Pandian Saraswathi Yadav Engineering College on 13th and 14th March 2020.

2. Presented a paper titled “A Review on Deep learning based Brain Tumor Segmentation in MRI” in SITCON 2019 held at Sethu Institute of Technology, on march 2019.

3. Presented a paper titled “Performance Analysis of Nanoparticles in Healthcare and Biomedical Applications” in 7th International Conference on Innovation in Electronics and Communication Engineering (ICIECE) held at Guru Nanak Institution, Hyderabad on 27th -28th July 2018(published in springer Lecture Notes in Networks and Systems 65, https://doi.org/10.1007/978-981-13-3765-9_2).

4. Actively Participated and presented the paper entitled on, “Radioprotectors and radiosensitizers for effective radiotherapy treatment” in ICRAET’17 at Srikrishna College of engineering and technology.

5. Presented a paper titled “Automatic detection of prostate cancer in MRI images using image processing” in ICDAC 2019 held at K.L.N College of Information Technology on march 2019.

6. Actively Participated and presented the paper entitled on, “Detection of Fetal Stress from Maternal Abdominal ECG” in ICCVNI 2018 at Gandhigram Rural Institute.

7. Actively Participated in International conference REECE-17 and presented a paper

entitled on “Smart vehicle security system” at P.S.R.Engineering college.

8. Participated in International conference REECE-17 and presented a paper entitled on “Charging of electric vehicle based on wireless power transmission” at P.S.R.Engineering college.

9. Actively Participated in International conference sponsored by IEEE and presented a paper entitled on “Identification and segmentation of exudates in retinal images using SVM classifier” at Karpagam college of engineering, 2015.

10. Presented a paper titled “IoT Based Tomat Storage system” in ETICT, Sethu Institute of Technology, 2024

11.Presented a paper titled “Automatic Brain Tumor Segmentation” in ETICT, Sethu Institute of Technology, 2024

12.Presented a paper titled “IoT Enabled Smart Aquaculture System” in ETICT, Sethu Institute of Technology, 2024

NATIONAL: (TOTAL COUNT: 2)

1. Actively Participated and presented the paper entitled on, “**A study on Contrast Agents and Their Uses in Medical Imaging**” in National Conference on Emerging Trends in Information and Communication Technologies at Sethu Institute of Technology on Apr 2018.

2. Participated in National Conference and presented on a paper entitled “**Automatic Detection Of Exudates in retinal images**” at S. Veerasamy Chettiar College of Engineering and Technology.

Details of Patents Filed and Granted:

1. Gogreen Sanitary pad-2021410560004-Filed
2. Iot Enabled Environmental Monitoring And Rottening Prevention In Tomato Storage – 202441099355-Published

Sponsored Project:

Title of Project	Duration	Amount (Rs.)	Sponsoring Agency
Accurate Classification and Detection of Brain Cancer Cells in MRI And CT Images Using Nanocontrast Agents	2 Years	0.4 lakhs	IEI
SHE – A Wearable Smart Shoe for Women Safety	2 Years	2.5 Lakhs	EDII

Portable Kashaya Making Machine	2 Years	2.5 Lakhs	EDII
IoT Based Smart Aquaculture System	2 Years	2.5 Lakhs	EDII
IoT Based Smart Tomato Storage System	1 Years	1.0 Lakhs	Ministry of Food and Consumer affairs
Tomato Grading	6 Months	0.1 Lakhs	Naan Mudhalvan, Niral Thiruvizha 1.0
GrowSmart	6 Months	0.1 Lakhs	Naan Mudhalvan, Niral Thiruvizha 2.0
Poultry Farming	6 Months	0.1 Lakhs	Naan Mudhalvan, Niral Thiruvizha 2.0
SHE – A Wearable Smart Shoe for Women Safety	1 Years		MSME 4.0