

Dr. A Ravi Raja



Designation: Assistant Professor

E-Mail ID : araviraja@vrsiddhartha.ac.in

Contact at: EC-313, Department of Electronics and Communication

Engineering, Velagapudi Ramakrishna Siddhartha School

of Engineering, Kanuru, Vijayawada, Krishna (Dt.),

Andhra Pradesh 520007.

Education

Ph.D. (Electronics and Communication Engineering)

2025, S. R. M. Institute of Science & Technology, Chennai

M.Tech (Communication Engineering and Signal Processing)

2013, Velagapudi Ramakrishna Siddhartha Engineering College, JNTUK

B.Tech (Electronics and Communication Engineering)

2011, Vasireddy Venkatadri Institute of Technology, JNTUK

Experience

Period	Designation	Institution / Organization	Key Responsibilities
2013-2014	Research	Velagapudi Ramakrishna Siddhartha	Research
	fellow	Engineering College	
2014-Till	Assistant	Velagapudi Ramakrishna Siddhartha	Syllabus preparation, Student
Date	Professor	School of Engineering, SAHE	Counselling, UG projects
			guidance, DSP & PNT Labs
			Incharge, research publications,
			NBA/NAAC/ coordination.

Research Interests

Broad Area of Research:

- Bio-medical Signal & Image Processing
- Digital Signal & Image Processing
- Remote Sensing Applications

Honors and Awards

• Best paper Award in ICSPC 2023 conference

Courses Taught

S.No	Course Name	Level (UG/PG)
1	Advanced Digital Communications	PG
2	Advanced Digital Image Processing	PG
3	Electronic Devices and Circuits	UG
4	Digital Image Processing	UG
5	Advanced Wireless Communications	UG
6	Cryptography and Data Security	UG
7	Introduction to Machine Learning	UG
8	Optical Communications	UG
9	Global Navigation and Satellite Systems	UG
10	Satellite Communications	UG
11	Computer Networks	UG
12	Remote Sensing and GIS	UG
13	Basics of Electronics	UG

Publications

The recent publications and research contributions can be viewed from the following URLs

Google Scholar	https://scholar.google.com/citations?user=we6WVRAAAAAJ&hl=en	
Scopus	https://www.scopus.com/authid/detail.uri?authorId=24776512000	
ORCID	http://orcid.org/0000-0001-9543-0860	
dblp	https://dblp.org/pid/339/8343.html	
Publons	https://publons.com/researcher/3700200/raviraja-akurathi/	
Research Gate https://www.researchgate.net/profile/Raviraja_Akurathi2		
LinkedIn https://www.linkedin.com/in/raviraja-akurathi-08326075/		
IRINS	https://vrsiddhartha.irins.org/profile/330125	

Recognized Research Supervisor

S.No.	Department	University
01.	-	
02.		

Funded Research Projects

S.No.	Type	Title	Status	Funding Agency	Amount (INR)	Duration
01.	Funded	Develop ment of Image Processi ng methods for assessing the content of Trees outside Forest Area (TOF) using IRS High	Completed	NRSC, ISRO Hyderabad	10,10,000	2012-2014 2 Years

•

		Resolutio n Satellite Images.				
02.	Funded	Develop ment and Evaluati on of Algorith ms for automate d Tree Delineati on and Tree Paramet ers (Height and Crown Diameter) Estimati on for Forestry Applicati ons	Completed	NRSC, ISRO Hyderabad	16,90,000	2016-2018 2 Years
03.	Funded	Develop ment of Web Based Tools for online/of fline Inclusion of Value- added Services and Analysis on BHUVA N for	Completed	NRSC, ISRO Hyderabad	14,50,000	2016-2018 2 Years

High Resolutio		
n Resolutio		
Satellite		
Imagery		

Administrative Roles

S.No.	Role	Institution	Duration	Responsibilities
1	IQAC Member	VRSEC	2020-2022	Academic Audits

Certifications/MOOC Courses Completed

NPTEL:

- 1. "Biomedical Signal Processing" by Indian Institute of Technology Kharagpur.
- 2. "Remote Sensing and Digital Image Processing of Satellite Data" by Indian Institute of Technology Roorkee.
- 3. "Outcome Based Pedagogic principles for Effective Teaching" by Indian Institute of Technology Kharagpur.
- 4. "Introduction to Machine Learning" by Indian Institute of Technology Kharagpur.
- Completed NEP 2020 Orientation & Sensitization programme under Malaviya Mission Teacher programme (MM-TTP) of University Grants Comission (UGC) Organised by Andhra University, during 22.07.2024 to 30.07.2024.

Coursera:

- 1. "Python Basics" an online course authorized by University of Michigan and offered through Coursera.
- 2. "Programming for Everybody (Getting Started with Python)" an online course authorized by University of Michigan and offered through Coursera.
- 3. "Python Data Structures" an online course authorized by University of Michigan and offered through Coursera.
- 4. "Launching into Machine Learning" an online course authorized by Google Cloud and offered through Coursera.
- 5. "AI For Everyone" an online course authorized by deeplearning.ai and offered through Coursera.
- 6. "How Google does Machine Learning" an online course authorized by Google Cloud and offered through Coursera.
- 7. "TensorFlow for AI: Get to Know Tensorflow" an online course authorized by Coursera Project Network and offered through Coursera.

- 8. "Support Vector Machines with scikit-learn" an online course authorized by Coursera Project Network and offered through Coursera.
- 9. "Google Cloud Platform Fundamentals: Core Infrastructure" an online course authorized by Google Cloud and offered through Coursera.
- 10. "Technical Support Fundamentals" an online course authorized by Google and offered through Coursera.
- 11. "Introduction to Programming with MATLAB" an online course authorized by Vanderbilt University and offered through Coursera.
- 12. "Exploratory Data Analysis with MATLAB" an online course authorized by MathWorks and offered through Coursera .
- 13. "Open Source Software Development Methods" an online course authorized by The Linux Foundation and offered through Coursera.
- 14. "Linux for Developers" an online course authorized by The Linux Foundation and offered through Coursera.
- 15. "Work Smarter, Not Harder: Time Management for Personal & Professional Productivity" an online course authorized by University of California, Irvine and offered through Coursera.
- 16. "COVID-19 A clinical update" an online course authorized by University of Florida and offered through Coursera.
- 17. "COVID-19: What You Need to Know (CME Eligible)" an online course authorized by Osmosis and offered through Coursera.

LabView:

• Certified labVIEW Associate Developer from National Instruments (NI).

NVIDIA:

• "Fundamentals of Deep Learning" by NVIDIA Deep learning Institute.

MATLAB:

- 1. Machine Learning certification by MATLAB.
- 2. Deep Learning certification by MATLAB.

IIRS (Indian Institute of Remote Sensing, ISRO):

- 1. "Remote Sensing and GIS Applications in Carbon Forestry" from February 16, 2017 to March 10, 2017.
- 2. "Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System" conducted from August 21, 2017 to December 04, 2017.
- 3. "Remote Sensing and Digital Image Analysis" from September 04, 2018 to September 14, 2018.
- 4. "Application of Geoinformatics in Ecological Studies" from July 13, 2020 to July 24, 2020.
- 5. "Geospatial Inputs for Enabling Master Plan Formulation" from July 27, 2020 to July 31, 2020.
- 6. "Remote Sensing Applications in Agricultural Water Management" from August 03, 2020 to August 07, 2020.

Consultancy / Industry Projects

Completed	00
On-going	00
Applied	00

Patents

S.No	Title	Status	Application	Year
			No.	
1.	Exploring The Positive Impact of ML And	Published on:	202441042093	2024
	Social Media on Academic Performance	07.06.2024		
	and Mental Well-Being in the Smart			
	Learning Era: A Student Perspective			
2.	A Methodology to Analyse the Images of	Published on:	202241071402	2022
	Kidney Captured Using Medical	30.12.2022		
	Modalities for Anomaly Detection with			
	Algorithms of Machine Learning			
3.	An IoT integrated blockchain technique to	Published on:	202241005364	2022
	handle security information over cloud	11.02.2022		

Ph.D

Awarded	
Guiding	

Invited Talks

No. of Invited Talks	01
----------------------	----

Professional Service / Reviewer

- Biomedical Signal Processing and Control
- Measurement
- Heliyon
- Image and Vision Computing
- Measurement
- Signal Processing
- IEEE Access

Professional Development Activities - Participations

Faculty Development and Training Programmes	20
(at least 5 Days)	
International / National Level Seminars	10
International / National Level Conferences	20
Workshops	15
Instructor Led / Self-Paced Courses	20
Webinars	15

Professional Bodies Membership Details

S.No.	Membership No.	Society Name
1.	M-505157	IETE

A. Ravi Raja

(Dr. A. Ravi Raja)