Name :   K.SudhaRani

Designation: Associate Professor

Department: EIE

Mail.I.D: sudharani-k@vnrvjiet.in

Experience (in years): Teaching:14   Research: 5   Others :--
1. Educational / Technical qualifications:
2. Teaching and Learning:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	B.Tech	2001	EIE
2	M.Tech	2005	Industrial Process Instrumentation
3	P.h.D.	2018	Bio Medical Instrumentation

     2.1.   Teaching Interests: Virtual Instrumentation, Image Processing, Bio Medical
     2.2.   Novel Teaching & Learning Techniques adopted: Pogil
2.3. Involvement in curriculum updating / Design:
3 Co-curricular and Extra-Curricular Activities

3.1Professional Society memberships:-
- ❖ ISO Life Member
- ❖ International Association for Engineers Life Member
- ❖ Member, Universal Scientific Education and
- ❖ Research Network(USERN),IRAN
  SCIREA Member 5

3.2. Interests and Hobbies:
3.3. CCA/ECA Organized: Member of Invitation Committee for Cultural and Annual Day
3.4. CCA/ECA participated:Convergence
3.5 Counseling and Mentoring Activity: Mentor
3.6. Committees involved in: Technical Committee member and Session manager for Video calls in IACC 2017
   Department level:
- ❖ IV B.TECH Technical Seminar Member,Show and Tell In-charge,Lab Protocol Incharge, EEEE LabIncharge, Department Bos Member. PG Coordinator
- ❖ PG Coordinator
- ❖ I year Induction Program Coordinator
- ❖ Member of Department Development committee
- ❖ Member of Department Academic committee
- ❖ Mentor
- ❖ Departmental R&D coordinator

  Institute Level: Academic Committee Departmentalin-   charge
4. Conference / Workshop / Seminar / Guest Lectures:
   4.1 Conducted: Guest Lecturer on"Applications of Instrumentation &Control in Process Industry ", on 6th of February , 2017
  Conducted : 1.Refresher course on Lab view 2.Organizd PCB Design and Fabrication Workshop on 5-1-2016 to 8-1-2016.

Conducted Guest Lecture on "Image Fusion techniques in Biomedical Applications" on 27th January 2016, for 4thB.TechEIE,M.Tech students and faculty members

4.2 Attended:

- Real Time Embedded system development conducted by ECE Dept, Nov 2013
- Research Methodology, JNTU Kakinada1-5-2014 To 15-5-2014
- Intellectual Property Rights, JNTU Kakinada,16-5-2014 To 30-5-2014
- Pogil Workshop, 7-12-2014 To 8-12-14
- 3D Printing,VNRVJIET, 19-3-2015 To 20-3-2015
- One week short term Course on "Advances in Additive and Digital manufacturing manufacturing"Sponsored by Ministry of Human Resource evelopment (MHRD), Govt. of India Under the Scheme 'GiAN' by Dept. of Mechanical Engineering ,University College of Engineering, Osmania University,Hyderabad, Telangana- 500 007 during 25 th to 29 th March 2019

5   Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

S.No	Title of the Lecture / Academic Session	Title of Conference / Seminar	Organized by	Whether International / National
1.	Chairing the technical session on 'Advanced Commutations and Networking'	7th **IEEE** international advance computing conference (IACC 2017)	VNR VJIET, Hyderabad	International
2	3D Printing for Biomedical Applications	3D Printing	Velagapudi Ramakrishna Siddhartha Engineering College,Vijayawada	National
3	Medical Image processing	Image processing Applications	Banasthali University,Vanasthali Road, Dist, Vanasthali, Rajasthan 304022	National
4	Technical Paper writing	Technical Paper Writing Workshop (2018)	EIE Department, VNR VJIET, Hyderabad	International
5	Resource person in webinar Image processing Applications (13-8-20)	Webinar on Image processing Applications	conducted by EIE Department , VNRVJIET	National
6	Technical Paper writing	Technical Paper Writing Workshop (2019)	EIE Department, VNR VJIET, Hyderabad	EIE Department, VNR VJIET, Hyderabad
7	Resource person LabVIEW Programming 2015-16	Refresher course on Lab view	EIE,VNRVJIET	National

8	Reviewer for Ph.D Thesis	Information Retrieval from Brain MRI Images for Tumor Classification: Soft Computing Techniques.	Banasthali University, Vanasthali Road, Dist, Vanasthali, Rajasthan 304022	National
9	Ph.D. Viva voce External examiner	Information Retrieval from Brain MRI Images for Tumor Classification: Soft Computing Techniques.	CSE Department, Banasthali University, Vanasthali Road, Dist, Vanasthali, Rajasthan 304022	National
10	Reviewer for: Advances in Science, Technology and Engineering Systems Journal.	Comparison of Electrogastrograms in Seated and Supine Positions Using Wayland Algorithm to Evaluate Motion Sickness Induced by Stereoscopic Movies of Special Issue	Advances in Science, Technology and Engineering Systems Journal (ASTESJ) (ISSN: 2415-6698)	International

5.2. Articles/Chapterspublished inBooks:
1. 3D Tumor Segmentation using Surface Rendering Technique, 3-6 Communication and Computing Systems, Taylor &Francis Group, CRC Press, London.E-Isbn: 9780429444272 DOI: https://doi.org/10.1201/9780429444272
2. Brain tumor detection using supervisory nearest neighbor algorithm, Pp 449 - 455, Communication and Computing Systems, Taylor &Francis Group, CRC Press, London.E-Isbn:9780429444272,Doi: https://doi.org/10.1201/9780429444272

5.3. Bookspublishedassingleauthororaseditor:
Brain tumor segmentation using 3D Printing Technology by Dr.K.Sudha Rani,
Lambert Academic Publishing, ISBN:978-620-3-46316-3,2021.

5.4. Projects Guided:
a) UG:35Mini Projects, 50+ Major projects

b) PG:14Mini Project, 10 Minor Projects

5.5. Research Interests: Bio Medical Instrumentation

5.6. Ph.D students:

        a) Enrolled: b) Submitted: c) Awarded:

5.7. Papers published in reviewed Journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Prediction of Toxins in Chemical Industry by implementing Machine Learning Algorithms	Eur. Chem. Bull. **2023**,12(Special Issue 4), 1229-1239	20635346.	Scopus Indexed	International
2	Brain Tumour detection using Advanced Morphological Techniques	AMA, Agricultural Mechanization in Asia, Africa and Latin America	0084-5841	Scopus Indexed	International
1. 3	Histogram Related Threshold Technique for Region based Automatic Brain Tumor Detection, Vol 9(48), Pages 1-9	Indian Journal of Science and Technology, Dec 2016	ISSN (Online) : 0974-5645	**Web of Sciences,** Impact Factor: 1.63 **H-Index 41**	International
4	"Brain Tumor Detection Using Texture Characterisation and Classification Based on the Grey-Level Co-Occurrence Matrix"	International Journal of Electrical &Electroncs Research (IJEER)	Volume 4, Issue 2, Pages 35-39, June 2016 ISSN:2347-470X	1.63	International
5	Identificationc and Classification of Benign and Malignant Tumors in Brain using k-NN and	International Journal of Computer Science and Information Security (IJCSIS)	Vol. 14, No. 10, Oct-16,ISSN 1947-5500	0.519	International

	NN intelligent algorithms			
6	3D Multimodal MRI Brain Tumor Segmentation:A Volume Rendering Approach	International Journal of Current Trends in Engineering & Research (IJCTER)e-ISSN 2455–1392	Volume 2 Issue 6, June 2016, pp. 290 – 294.	Impact Factor 3.468	International
7	Face Recognition Office Security System Using Lab View 8.6	International Journal of Electronics, Communication &Instrumentation Engineering Research and Development (IJECIERD)	Volume 3,Issue 2,Pages 195-200	6.7847	International
8	Text File Encryption Using FFT Technique In Lab View 8.6	International Journal of Research in Engineering and Technology(IJRET),	Vol. 1 Issue 1, Pg. 29-45.		International
9	"Tumor Detection from Mammograms using Thresholding and Morphological operations"	International Journal of Engineering & Technology,	ISSN - 2227524X,Volume 7	4.22	International
10	Identification and Classification of Benign and Malignant Tumors in Brain using k-NN and NN intelligent algorithms 2016-17)	International Journal of Computer Science and Information Security (IJCSIS), Pages 790-799	ISSN 1947-5500	Impact Factor : 0.519	9

	Discrete Wavelet Transform in Image Compression Using Lab view (2014-15)	Journal of the Instrument Society of India,	ISSN 1748-0221	Impact Factor 1.366	10
11	3D DICOM Images Reconstruction using Lab View	International Journal of Electrical, Electronics and Data Communication, , pp 20-22	ISSN 2320-2984	Impact Factor 3.46 (SIF)	11
12	Discrete Cosine Transform in Image Compression Using Lab view 8.6 (2013-14)	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering	ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875	0.435	12
13	3D Multimodal MRI Brain Tumor Segmentation (2015-16)	A Volume Rendering Approach" International Journal of Current Trends in Engineering & Research (IJCTER), pp. 290 – 294	e-ISSN 2455–1392	Impact Factor 5.168(SJIF)	12
14	Simulation of Combustion Control by tweaking Air-Fuel Ratio (2019-20)	International Journal of Research, pp23-25	ISSN: 2348-795X	--	13
15	Leg Bone Fracture Segmentation and Detection using Advanced Morphological Techniques (2019-20)	International Journal of Recent Technology and Engineering (IJRTE) 1246-1249	ISSN: 2277-3878	H-Index 17	14

	Texture Characterization and Classification to Detect Brain Tumor (2019-20)	International Journal of Innovative Technology and Exploring Engineering	ISSN: 2278-3075	H-Index 40	15
1`6	Mitigation of congestion in deregulated electricity Market	Global Web Conference on Multidisciplinary Research and Development, Organized By Sarojini Research and Development Council, New Delhi - Odisha - Kerala - Karnataka - Tamilnadu / GWCMRD - 2020 Proceedings	ISBN Number: 978-81-945642-5-6	Mitigation of congestion in deregulated electricity Market	16

5.8. Papers presented at National / InternationalConferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1.	Brain Stroke Detection using K-Nearest Neighbor and Minimum Mean Distance Technique,770-776	International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), December 22nd to 24^{th,} 2015, Kanyakumari, Tamilanadu.	**Electronic ISBN:**978-1-4673-9825-1 **DVD ISBN:**978-1-4673-9824-4	December 22nd to 24^{th,} 2015,
2	Intelligent Brain Tumor Lesion Classification and Identification from MRI Images Using k-NN	International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), December 22nd	Scopus, **Electronic ISBN:**978-1-4673-9825-1 **DVD ISBN:**978-1-4673-9824-4	December 22nd to 24^{th,} 2015,

	Technique, 777-780	to 24th, 2015, Kanyakumari, Tamilanadu.		
3	Extended Pillars K-Means Clustering for Automatic Brain Tumor Technique	Recent Trends in Power, Control and Instrumentation Engineering, PCIE 2015,	Scopus, 978-81-931119-2-5,December 26th,2015,Kerala	December 26th,2015,
4	A Novel Energy Management System in Sugar Industry Co-Generator Plant	Computational Intelligence and Computing Research (ICCIC), 2014 (**IEEE conference**)	Scopus, ISBN: 978-1-4799-3975-6	2014
5.	Machine Intelligence for Identification of Endothelial Corneal layer diseases with Novel Morphological Algorithm	2019 International Conference on Intelligent Computing and Control Systems (ICCS), (IEEE Conference)	Scopus, 15-17 May 2019, **Electronic ISBN:**978-1-5386-8113-8 **Print on Demand(PoD) ISBN:**978-1-5386-8114-5	2019
6	Plant Leaf Disease Detection Using Machine Learning Techniques	3Rd International Conference on Computer Networks and Inventive Communication Technologies (ICCNCT - 2020), RVS technical Campus, Coimbatore, India. **Springer**	Proceedings will be published in **Lecture Notes on Data Engineering and Communications Technologies**, **ISSN**: 2367-4512, **Springer** US | Publons.	2020

7	Identification of Brain Tumors using Volume rendering Techniques	International Conference on Artificial Intelligence and Smart Systems (ICAIS 2021)	Paper accepted	2021

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received: NIL

7. Motto: