Name: Dr. **V Sagar Reddy**
Designation: **Assistant Professor**
Department: **Electronics and Communication Engineering.**
Email Id: sagarreddy_v@vnrvjiet.in
Experience (in years): **10**   Teaching: 08   Research: 05   Others
(Industry) : 01

1. **Educational / Technical qualifications:**

S. No	Level (UG / PG / Ph.D)	Year	Specialization
1.	Ph.D	2021	VLSI Signal Processing
2.	Diploma (HCU)	2022	AIML
2.	M.Tech	2015	Embedded Systems
3.	B.Tech	2011	Electronics and Communication Engineering.

2. Teaching and Learning:
  2.1. Teaching Interests: Electronic Devices and Circuits, Control Systems, Signals and Systems, Digital Signal Processing and VLSI Signal Processing
  2.2. Novel Teaching & Learning Techniques adopted: POGIL, WIT & WIL and Learning by Doing.
  2.3. Involvement in curriculum updating / Design: Involved in preparing Syllabus.

3. Co-curricular and Extra-Curricular Activities
   3.1. Interests and Hobbies: Playing Badminton and cricket.
   3.2. CCA/ECA Organized:
 • Organized one week workshop on "IOT and Embedded Systems" during 20th -25th Feb.2017 in collaboration with FICE Educational Institute, Bangalore.
 • Organized IOT certificate courses.
   3.3. CCA/ECA participated:
      • Fellow of IETE member
      • Fellow of IEEE.
      • Participated in various Sports Fests.
   3.4. Counselling and Mentoring Activity: Counselling the needy students and monitoring their progress in attendance as well in performance
   3.5. **Committees involved in:**
   Department level:
      ❖ *Member of Project review committee.*

      ❖ *Department NAAC coordinator.*

      ❖ *File in-charge for ECA/CCA file.*

      ❖ *File in-charge for JNTU Visit Preparation and MAC IDs.*

   Institute Level: *Co-ordinator for VNR Student Force (VNR SF)*

4. **Conference / Workshop / Seminar / Guest Lectures:**
      4.1.Conducted: 2
         1. Organized one week workshop on "IOT and Embedded Systems" during 20th -25th Feb.2017 in collaboration with FICE Educational Institute.
         2. Conducted IOT Boot Camp during summer vacation 2017-18.

4.2　　Attended:
- FDP201x, "Pedagogy for Online and Blender Teaching-Learning Process" conducted by IITB. 30-10-2018 to 13-12-2018.
- FDP101x, "Foundation program in ICT for Education" conducted by IITB. 13-09-2018 to 18-10-2018.
- FDP on "Recent Trends in Signal Processing and Its Applications" conducted by NITW 22nd June to 1st July, 2017.
- Attended a 2-day workshop on "IOT & Embedded Applications" organized by VNRVJIET in collaboration with FICE Pvt.Ltd, Bangalore at VNRVJIET from 20 & 21st Feb,2017.

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: 01

5.2. Articles/Chapters published in Books: Nil

5.3. Books published as single author or as editor: 01

5.4. Projects Guided: a) UG: 10　　　　b) PG: 07

5.5. Research Interests: Machine Learning, AI, VLSI Signal Processing and Speech Processing

5.5 **Patents:**

　　1. Patent Application-202341018492, titled "SECURITY SYSTEM FOR WOMEN SAFETY AND REAL-TIME MONITORING" has been filed on 18.03.2023 and published at Indian patent on 31.03.2023.

5.6 **Research Publications:**

International Journals

[1].　**Vumanthala, Sagar Reddy** and k, bikshalu (2020) "Nonlocal means estimation of intrinsic mode functions for speech enhancement," *Turkish Journal of Electrical Engineering and Computer Sciences*: Vol. 28: No. 1, Article 23.

[2].　**Vumanthala, S.R.**, Kalagadda, B. Modified Nonlocal Means Filtering for Speech Enhancement and Its FPGA Prototype. *Circuits Syst Signal Process* **40**, 6035–6049 (2021).

[3].　**Vumanthala, S.R.** and Kalagadda, B. (2020), Real-time speech enhancement using optimised empirical mode decomposition and non-local means estimation. IET Comput. Digit. Tech., 14: 290-298. https://doi.org/10.1049/iet-cdt.2020.0034

[4].　**V. Sagar Reddy**, Dr.L.Padma Sree and V. Naveen Kumar, "Design and Development of accelerometer based System for driver safety ", International Journal of Science, Engineering and Technology Research (IJSETR), ISSN: 2278–7798, Volume 3, Issue 12, December 2014, pp.3463-3468.

[5].　P. Srinivas rao and **V. Sagar Reddy**,"Bandwidth Extension of Speech using Data Hiding method", International Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162, Vol.3, Issue 7, July-2016, page no.48-50.

[6].　Ganesh Chokkakula, Naresh k and **V. Sagar Reddy** "Dual-threshold Single-ended Schmitt-Trigger Based Radiation Hardened memory Design with Fault modeling System". IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 7, Issue 4, Ver. I (Jul. - Aug. 2017), PP. 73-80 e-ISSN: 2319 – 4200, p-ISSN No.: 2319 – 4197.

[7].　**V. Sagar Reddy**, Gujjula Ramya and V. Moneesh Reddy. "Greenhouse Environment Monitoring and Automation using Intel Galileo gen and IOT. International Journal

of Innovative Technology and Exploring Engineering (IJITEE). ISSN: 2278-3075, Volume-8 Issue-7S2, May 2019, pp. 554-559

[8]. **V. Sagar Reddy** and Dr. K. Bikshalu. "Speech Enhancement using Discrete Wavelet Transform and Nonlocal Means Estimation". Jour of Adv Research in Dynamical & Control Systems. Vol. 11, 04-Special Issue, 2019, pp: 1834-1840.

[9]. CH. Paveen Kumar, Dr.V. Padmaja, CH. Nagadeepa and **V. Sagar Reddy**. "On Line English Character Recognition using Raspberry Pi". International Journal of Science, Engineering and Technology Research. ISSN: 2319-8885, 2017.

International Conferences

1. Shilparani, S., Reddy, K.S., & **Reddy, V.S.** (2021). FPGA Implementation of FIR Filter Architecture using MCM Technology with Pipelining. *2021 2nd International Conference for Emerging Technology (INCET)*, 1-5.

2. Y. C. Rao, P. Lavanya, **V. S. Reddy** and V. N. Kumar, "A Deep Learning Approach Lung Segmentation and Pneumonia Detection From X-Rays," *2022 International Conference on Recent Trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC)*, Hyderabad, India, 2022, pp. 167-173, doi: 10.1109/ICMACC54824.2022.10093274.

3. K. M. Mohan, K. Naresh, C. Ganesh, **V. S. Reddy** and K. H. Kishore, "Implementation of N-Point FFT/IFFT processor based on Radix-2 Using FPGA," *2022 International Conference on Recent Trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC)*, Hyderabad, India, 2022, pp. 499-504, doi: 10.1109/ICMACC54824.2022.10093290.

4. K. S. Reddy, C. S. Gagan Bihari and **V. S. Reddy**, "FPGA IMPLEMENTATION OF ERROR DETECTION AND CORRECTION IN SRAM EMULATED TCAMS," *2022 International Conference on Recent Trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC)*, Hyderabad, India, 2022, pp. 1-8, doi: 10.1109/ICMACC54824.2022.10093662.

6. Awards / Honours received:

- ✓ Qualified **UGC-NET and Gate Exam (2012,2013 and 2018)**
- ✓ Got Elite in NPTEL online certification course in Networks and Systems.

7.Motto