



**Name** : Dr.Yarlalagadda Padma Sai  
**Designation:** Professor, Head ECE  
& Dean Students Progression  
**Department:** Electronics and Communication Engineering  
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**Experience (in years):** Teaching: 24, Research: 14,  
**Others (If any, Specify):** Industry-6Yrs.

## 1. Educational/ Technical Qualifications

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph. D	2009	ECE (Bio-Medical Signal Processing)
2	M.E	1998	Systems and Signal Processing
3	B. Tech	1989	ECE

## 2. Teaching and Learning

**2.1. Teaching Interests:** Signals and Systems, Digital Signal processing, Analog Communications, Digital Communications, - Satellite Communications, - Digital Image Processing- DSP Processors and Architectures, Advanced Digital Signal Processing-Image and Video Processing and VLSI Signal Processing

**2.2. Novel Teaching & Learning Techniques adopted:** WIT & WIL, LBD, Project based learning

**2.3. Involvement in curriculum updating / Design:** Actively involved in the designing of Course Structure and Syllabus since the college has attained autonomy. Involved in Preparation of PEOs, POs and COs

## 3. Co-curricular and Extra-Curricular Activities

### 3.1. Interests and Hobbies

- Networking and Social Service
- Finding the industry partners and establishing rapport between institute and industry partners and active involvement in the execution of projects
- Closely working with Professional Societies

### 3.2. CCA/ECA Organized

- ECE department in association with IEEE Hyderabad section , IEEE signal processing society and IEEE WIE AG Hyderabad Section organized a 4-Day virtual event **IEEE SPS Summer School on Internet of Things for Biomedical and Healthcare Applications** from 28th to 31st December 2020(Received \$3000)
- IEEE VNRVJIET CAS & WIE in association with ECE department organized **Coding Contest** for I B.Tech ECE students (140) from 2:30PM to 4:00PM on 03-06-2021. The faculty and 3rd-year students explained all the basic concepts and terminology used for coding platforms. The session cleared all the ambiguities related to the coding contest.
- IEEE VNRVJIET Student Branch is organized a guest talks for I B. Tech students (221) on **Roadmap to Successful Career, Habits of Excellence & The Role of IEEE** on 05-06-2021 from 2.30PM to 5PM.

Speakers of the event:

1. Mr. Madhav Negi - IEEE Senior Member; Digital Innovation manager, DXC Technology India.
2. Mr. T. Vidya Sagar - Chair- SAC, IEEE Hyderabad Section.
3. Dr. Y. Padma Sai - Chair-IEEE WIE AG, IEEE Hyderabad Section

4. Ms. Ankitha G (2020) & Mr. Ganesh Reddy (2019) - Alumni of VNRVJIET; Members of Young Professionals Affinity Group, Hyderabad Section. Student Branch counsellor, advisors of all student branch chapters are also address during the program.

- Conducted debate competition for IEEE Hyderabad section WIE & Computer Society Mini congress on 3rd October 2020.
- Organised and attended **mini congress AHCWVC'20** (All Hyderabad Computer Society Women In Engineering Virtual Congress) on 06-10-2020.
- IEEE VNR Organising various events to educate mezzanine technologies for both faculty and Students.
- As a Chair WIE AG IEEE Hyderabad section conducted 20 events, 5 administrative meetings and inaugurated 4 new WIE AGs (from 1st Jan 2021 to till date).
- Guest for virtual inauguration of IEEE Narasaraopet institute of Technology on 15-05-2021.
- Guest for virtual inauguration of IEEE SVEC on 21-06-2021.
- Reviewed 4 papers for 1st International Conference on Advances in Signal Processing Communications and Computational Intelligence (ASCCI) 2021 Conference.
- Reviewed 3 papers of 64th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS 2021).
- Reviewer for Journal of Intelligent Systems.
- Reviewer for 2021 IEEE International Symposium on Circuits & Systems.
- Reviewed paper titled Applying Interpretable Deep Learning Models to Identify Chronic Cough Patients using EHR Data for Computer Methods and Programs in Biomedicine, Elsevier.
- As a Chair WIE AG IEEE Hyderabad section conducted 31 events, 4 administrative meetings and inaugurated 2 new WIE AGs (from 1st Jan 2020 to 31st Dec.2020).
- As a IEEE student Branch councillor organised various virtual webinar series (IOT, ML & RTL etc.) from April 2020 to till date.
- Organised and guest for **All Hyderabad Women in Engineering Student Congress 2020** held at Geethanjali college of Engineering and Technology on 05-03-2020.
- Organized and attend as guest of honour for Two Day Workshop on **Challenges for Professional Women: Work - Life Balance** (Take Command, Be Empowered and Own Your Future) 7th & 8th February 2020 organized by IEEE Hyderabad Section In association with Department of Electrical Engineering, UCE(A), O.U.
- Organizing Member and Guest for ISTE TS section 14th ISTE TS Section Annual Convention and Awards function- 2019 held on 30th December 2019 at 3PM in GNITS, Hyderabad.
- Attended as chief guest for valedictory function of **Effective Teaching Methodology** organized during 28th & 29th June 2019 at Siddhartha Institute of Engineering Technology, Ibrahimpatnam.
- Attended as Working Committee Member of **All India Student/YP/WIE Congress 2019** on 28th to 30th Sep 2019.
- Attended as Guest of honor 4th ISTE Telangana Section State Level Students Convention 2019, Nalla Malla Reddy Engineering College, 23-24 January 2019.
- Organizing Member and Guest for ISTE TS section 13th Annual Convention and Awards Function-2018 held on 19th January 2019 at 3PM in MLRIT, Hyderabad.
- Attended as guest of honor for IEEE WIE Congress on **Women in Technology - Social Responsibility**, G. Pulla Reddy Engineering College, Kurnool on 23rd March 2018.

- ISTE student chapter of VNR VJIET organized a National level annual Quiz competition conducted by NIT Bhopal on 20th of January 2018 (Chimera-X).
- Attended as chief guest for one-week AICTE-ISTE Short Term Training Programme on **Intellectual Property Rights and Innovations** organized by ISTE Chapter of Nalla Narasimha Reddy Education Society's Group of Institutions (NNRG), Hyderabad during 27th November to 2nd December 2017.
- Attended as a guest of honor at Sree Vision-2017 and received 3 prizes on behalf of students in Sports on 17-09-2017 at Sreenidhi Institute of Science & Technology, Ghatkesar, Hyderabad-501301.
- Organizing Member and Guest for ISTE- AP & TS sections 12<sup>th</sup> Annual Convention and Awards Function-2017 on 29<sup>th</sup> December 2017 at AITAM, Tekkali.
- IEEE, IETE and ISTE Chapters of VNRVJIET conducted an inspiring session on **The Art of Teaching and Administering the Students** by Dr. Yandamuri Veerendranath on 13-12-2017.
- Organised Technical Symposium INFERNO 2K17 by IEEE Student Branch of VNRVJIET on 18th September 2017.
- The Celebrations of Engineer's Day & Inaugural Ceremony of Workshop on Gesture Control Robot on 15<sup>th</sup> September 2017 by IETE Student forum.
- FDP on **Recent trends in Signal Processing and Its Applications** organized by Dept. of ECE in collaboration with Electronics & ICT Academy, NIT, Warangal during 22nd June to 1st July, 2017
- Organized ISTE- AP & TS sections 11<sup>th</sup> Annual Convention and Awards Function-2016 on 2<sup>nd</sup> March 2017 at VNRVJIET.
- Organized one week workshop on **IOT and Embedded Systems** during 20<sup>th</sup> -25<sup>th</sup> Feb. 2017 in collaboration with FICE Educational Institute, Bangalore.
- Organized the 7th IEEE International Advance Computing Conference (IACC 2017) during 5<sup>th</sup> – 7<sup>th</sup> Jan. 2017 by VNRVJIET along with IEEE Computer Society India Council.
- Organizing Member and Guest of the ISTE State Level Student Convention – 2016 during 27 – 28<sup>th</sup> October 2016, being conducted jointly by the AP & TS Sections of ISTE at Mahatma Gandhi Institute of Technology (MGIT), Hyderabad.
- Organized Project Expo by IV. B. Tech ECE students 27<sup>th</sup> -28<sup>th</sup> Oct 2016
- Organizing Member and chief Guest at Malla Reddy Institute of Technology and Science (MRITS), Hyderabad, for the celebrations of ISTE Annual Day 2016 on 20-July- 2016.
- Convener for National fest convergence organized by all professional chapters of VNRVJIET in 2015-16.
- Advisory Committee member of International Conference on Paradigms in Engineering and Technology 2016 during 2<sup>nd</sup>- 3rd March 2016 at Methodist College of Engineering and Technology.
- Organized IEEE-CIS, Chapter sponsored workshop on “Cloud Big Data Analytics with Microsoft Azure Machine Learning and Power BI Tools” on 16th April, 2016 at the Institute.
- Attended as a guest of honor for the inaugural function of ISTE Supported One-week short term training program on Internet & Digital Convergence in India-Crafting the Future on 10<sup>th</sup> June 2015(10-14<sup>th</sup>), Organized by Methodist College of Engineering and Technology, Abids, Hyderabad.
- Attend inaugural function of ISTE Students Chapter of Joginpally B.R.Engineering College on 30<sup>th</sup> July, 2015 as Chief Guest
- Organizing member and guest of 10<sup>th</sup> ISTE AP & TS Section Annual Convention and Awards

function- 2015 on 29<sup>th</sup> December 2015 at seminar Hall of G.Pullaiah College of Engineering & Technology (GPCET ) Kurnool

- Organizing Member and Guest of the 11<sup>th</sup> ISTE State Level Student Convention – 2015 on 20<sup>th</sup> February 2016, being conducted jointly by the AP & TS Sections of ISTE at Brindavan Institute of Technology & Science (BITS)-Kurnool.
- Coordinator for National fest convergence organized by all professional chapters of VNRVJIET in 2009-11 and co-convener for 2012-2013 & 2013-14
- Organized ISTE- AP section 5<sup>th</sup> Annual Convention and Awards Function-2010 at VNRVJIET

### **3.3. CCA/ECA participated:**

- Senior Member IEEE
- Fellow of IETE
- Fellow of IEI
- Life member of Indian Society for Technical Education (ISTE)
- Life member of Instrumentation Society of India (ISOI)
- Life Member ASIC Association
- Chairman for WIE Affinity Group IEEE Hyderabad Section 2020,2021
- Advisory Committee member IETE Hyderabad Section 2020-2022
- Vice-Chairman for WIE Affinity Group IEEE Hyderabad Section 2018, 2019
- Secretary cum Treasure ISTE Telangana Section 2015-2019
- Execute Member ISTE AP Section for 2012-2014
- Member Short term training program committee IETE Hyderabad (2013-14)
- Initiated to start IUCEE consortium membership in 2014
- Initiated to start IETE Student forum in 2010 and Institute Membership of IETE
- Chairman of ISTE faculty chapter, Faculty advisor for Student chapter of ISTE, IETE
- Branch Counselor of IEEE student Branch from 2015- 2020
- Actively involved in Convergence, Annual day, Culture Day and Sport Day
- Member Women Empowerment in Engineering IETE Hyderabad Centre during 2014-16.

### **3.4. Counseling and Mentoring Activity**

- Counseling the needy students and monitoring their progress in attendance as well in performance

### **3.5. Committees involved in**

- Reviewer for BIOMESIP-2021
- Acted as session chair for the 8<sup>th</sup> International Conference on Computing, Communications and Sensor Networks (CCSN 2020) held at Institute of Aeronautical Engineering College during October 19-20, 2019
- Acted as jury member for 3rd edition of IIA International Innovation Fair (IIIF) organized in NSIC exhibition hall on 01-12-2019,Hyd.
- Reviewer for 2019 IEEE Asia Pacific Conference on Circuits and Systems, Sep 20, 2019
- Reviewer for Biomedical Circuits and Systems Conference (BIOCAS 2019), October 19, 2019
- Attended as a BoS Member for Joint Boards of Studies Meetings, JNTUH, 25<sup>th</sup> & 26<sup>th</sup> June 2019
- Program chair, 7<sup>th</sup> IEEE International Advance Computing Conference (IACC-2017)
- Nominated as Research Committee member, BME, college of Engg. OU from 2014 onwards.
- Jury Member for Innovators Association, AP & Innovation Society and International Innovation Fair Association held at Vishakhapatnam during 9 -11<sup>th</sup> Sep 2017 (IIA 2017)
- Technical committee member for 33<sup>rd</sup> National Convention of Electronics and

Telecommunication Engineers and National Seminar on “Recent Advances in IoT” during 29-30, November 2017 organized by The Institution of Engineers (India), Telangana State Centre

- Advisory Committee Member of 1st National Conference on “Recent Advancement in Electronics” (NCRAE – 2016), IFHE University, Hyderabad, 22-23 Jan 2016
- Technical Program Committee member and Session Chair of 6th IEEE International Advance Computing Conference (IACC-2016) February 27-28, 2016 Organized by IEEE Computer Society India Council S R K R Engineering College, Bhimavaram, India
- Session Chair in International Conference on Computing Communication and Sensor Network (CCSN-2015) organizing by CCSN and International Association of Science, Technology Management, Kolkata during 24<sup>th</sup> and 25<sup>th</sup> December 2015.
- Advisory Committee member of International Conference on Paradigms in Engineering and Technology 2016 during 2<sup>nd</sup> – 3<sup>rd</sup> March 2016 at Methodist College of Engineering and Technology.

- **Department level**

1. Chairman BoS from 2012 to till date
2. Member BoS (2 years 2010-12)
3. Member Department Development Committee
4. Member Department Academic Committee
5. Class Review Committee

- **Institute Level**

- Member Academic Council
- Member Research Committee
- IQAC Member
- Member of Institute Academic Committee from 2008 to till date
- Project Coordinator for M/S. Ananth Technologies Ltd.- 2009 – Till Date
- Coordinator -IIPC (2010-2013)
- Member Canteen and Library committee -2008-2013

- **Conference / Workshop / Seminar / Guest Lectures**

**4.1 Conducted : 130**

- Taken initiation, VNRVJIET (As Proctor Coordinator) in collaboration with MeitY and E & ICT Academy, NIT Patna for the Joint Global online Summer Courses-2021 through online mode and Organising 10 FDPs
- Taken initiation, VNRVJIET (As Proctor Coordinator) in collaboration with MeitY and E & ICT Academy, NIT Patna for the Joint Global online Springer Courses-2021 through online mode and organised 6 FDPs
- Taken initiation, VNRVJIET (As Proctor Coordinator) in collaboration with MeitY and E & ICT Academy, NIT Patna for the Joint Global online Summer Courses-2020 through online mode and organised 9 FDPs
- Department of ECE, Dept. of IT and ISTE, IETE, and ACM Chapters of VNR VJIET in collaborations with Supraja Technologies organized Cyber Security, June 2<sup>nd</sup> to June 6<sup>th</sup>, 2020
- FDP On Sensor Networks and IoT jointly Organized by E & ICT Academy, NIT Warangal & Department of ECE, IEEE, ISTE and IETE chapters of VNR VJIET from 26<sup>th</sup> to 31<sup>st</sup> August 2019 at VNRVJIET.
- FDP on “3D Printing for Industrial and Biomedical Applications Jointly Organized by E & ICT Academy, NIT Patna and Departments of ECE & EIE from 2<sup>nd</sup> to 6<sup>th</sup> December 2019.
- Workshop on IOT and Drones Bennett University, Noida, 26<sup>th</sup> & 27<sup>th</sup> January 2019

**During 2018-19:**

- Organized seminar on MatLab & Simulink on 01-06-2018 in collaboration with Mathworks (Mr. Prasanna Deshpande, Application Engineer)

- Organized workshop on Fundamentals of MatLab and its Applications in Engineering from 7-6-2018 to 8-6-2018 in collaboration with Capricot. (Mr.Prem, Application Engineer)
- Organized a three-day workshop on MatLab and Its Toolboxes in collaboration with Mathworks Pvt. Ltd Bangalore during 29<sup>th</sup> Aug 2018 to 31<sup>st</sup> Aug 2018
- Organized a Seminar on ‘Demystifying deep learning: A practical approach in MatLab’ in collaboration with Mathworks Pvt. Ltd Bangalore on 25<sup>th</sup> Sep 2018
- Organized a Seminar on Research Methodology, Research & funding proposals by “Dr. D . Viswanadham Chief Manager - Innovation Management IKP Knowledge Park 06-10-2018.
- Organized a two day MATLAB workshop from 17-12-2018 to 18-12-2018 , Mr. Prem Kumar, Capricot
- Organized workshop during 26<sup>th</sup> & 27<sup>th</sup> January 2019 on IOT and Drones by VNRVJIET’s AI Group of ECE, CSE & IT in association with leadingindia.ai of Bennett University, Noida during 26<sup>th</sup> & 27<sup>th</sup> January, 2019
- Organized workshop during 26<sup>th</sup> & 27<sup>th</sup> January 2019 on IOT and Drones by VNRVJIET’s AI Group of ECE, CSE & IT in association with leadingindia.ai of Bennett University, Noida during 26<sup>th</sup> & 27<sup>th</sup> January, 2019

#### 4.2 Attended : 146

##### During 2020-21

- Attended 3 day FDP on Effective Utilization of Digital Platforms for content VNRVJIET in coordination with ETmantra elearning solutions 13<sup>th</sup> to 15<sup>th</sup> July 2020.
- VNR IEEE SB & ECE Organised & Attended ECE PDP on **NBA in NUTSHELL** from 27<sup>th</sup> to 31<sup>st</sup> July 2020.
- ATAL FDP on **Sensors and Its Applications in Navigation Systems in Marine And Defence Environment** from 17.8.2020 to 21.8.2020
- Attended IEEE Hyderabad section 2020 IEEE (HYDCON)- 4th Industrial Revolution -9<sup>th</sup> to 12<sup>th</sup> September 2020.
- Attended ACCES international conference 18-09-2020& 19-09-2020 organized by GRIET.
- Attended webinar on **AI in Healthcare** by Dr. Ram D Sriram session organized by IEEE CS & CSE, VNRVJIET on 03-10-2020.
- Attended meeting to discuss planning of Returning Mothers Conference 2021 by Ramalatha Marimuthu, Secretary, IEEE Computer Society 2021 from 7.30 PM to 8.30 PM on 16<sup>th</sup> April 2021.
- Attended Registration seminar of Mr. K Naresh, pursuing Ph.D in NIT Meghalaya was conducted at 4.00 PM on 16/04/2021 who is working under the supervision of Dr. Shubhankar Majumdar and Co-supervision of Dr. Y. Padma Sai.
- Attended Webinar on **Electric Power Generation using Municipal Solid Waste in India – Opportunities and Challenges** organized by IEEE VNRVJIET PES SBC, on PES Day 2021 on 27-04-2021 at 2:00 pm to 3:30 pm. Speaker: Dr. M. Muthuraman, Additional General Manager, NTPC Ltd., New Delhi.
- Attended IEEE Hyderabad Section Student Activities Committee presents "IEEE Hyderabad Section SAC Student Branch Counselors and SB Leadership Meet up 2021" to embrace and acknowledge the Objectives and Opportunities and enlighten your SB operations through the thought provoking addresses from our pioneers on 25<sup>th</sup> April 2021 Time: 11AM - 1PM.

- Attended Bangalore Technology Conclave from 3rd to 7th October 2020.
- Attended R10 SYWL virtual congress-WIE4 - WIE Leaders Recommendations on 4th Oct, from 11.30to 1.00 & R10 SYWL - Closing Ceremony @ Sun Oct 4, 2020, 1:30pm - 3pm.
- Attended RAISE2020 - Global summit on Artificial Intelligence on 07-10-2020.
- Attended the webinar on “Job Readiness, Passion forInnovation: Pedagogies, Vocational Courses, Technology Bridges, AMPLE: Case Study” by Mrs.Amrita, E-Learning on 12-10-2020.
- PDP on **Mathematics for Data Science** organised by CSE dept. in association with CSI & IEEE CS chapters from 26 th -31 st Oct.2020.
- Attended the IEEE R10 Webinar A dialogue with IEEE Management Council Speakers on Tuesday, October 27, 2020, from 6.30 PM to 8.30 PM.
- Attended Faraday Memorial Lecture on **High Power Density Electric Machines for Applications in Renewable Energy Systems & Hybrid Electric Aircrafts**& PES/IAS/ PELS-Jt. Chapter in association with IEEE-Hyderabad Section, Invited Distinguished Speaker: Prof.Kiruba S. Haran, IEEE Fellow, Electrical and Compute Engineering, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, USA on 31-10-2020.
- Attended 5th IEEE International Conference on Computing, Communication and Automation is being jointly organized by Galgotias University, India and Aurel Vlaicu University of Arad, Romania from 30 th to 31 st October 2020 through IEEE WebEX.
- Attended Panel discussion on Technical Leadership Secrets - Across Generations and Cultures from 7:00 PM to 9:00 PM on 05-11-2020
- Attended the Workshop on Letter Writing for Official purposes organized by H&S, VNRVJIET from 2nd to 5th November 2020
- Attended IEEE Nagpur Subsection & IEEE India Council Presents IEEE Women In Engineering International Leadership Summit, Nagpur theme on & ignite, Inspire and Engage & Inauguration Ceremony followed by  
KeyNote1: Mary Ellen Randall, FIEEE, President/CEO, Ascot Technologies, Inc. USA: “Inspire and Engage”.  
KeyNote2: Prof. B. Ravi, PI-BETiC, IIT-Bombay: Innovation and Entrepreneurship, “ How to Create Success Stories” on 06-11-2020 from 6PM to 7.30PM.
- Attended Panel Discussion: **Women in Technology: WIE Lead** on 07-11-2020  
Moderator: Sukhada Chaudhary, Founder, Chaos Theory 12:00PM –1:10PM  
Track 1: Innovation, Entrepreneurship & Social Leadership, 1:10PM -2:30PM  
Track 2: Empowerment -2:30PM-3:50PM  
Panel Discussion: Rethinking Work: Flexibility & Engagement  
Moderator: Dr. Rajashree Jain, Vice Chair - Student Activities IC, 3:50PM- 4:55PM
- Attended IEEE Nagpur Subsection & IEEE India Council Presents IEEE Women In Engineering International Leadership Summit, Nagpur theme on Ignite, Inspire and Engage on 08-11-2020 from 10.15AM to 4.30 PM
- Attended webinar on **Choosing a career in Cyber Security** organized by IT, VNRVJIET on 10-11- 2020.
- Attended Webinar Series on **AI in HealthTech | AI4Innovators** organized by T-HUB and AWS on 20- 11-2020 at 11:00AM
- Attended webinar on **Outcome Based Education and Accreditation** organized by NBA, JNTUH MGIT on 25-11-2020.
- Attended BOS meeting, MLRIT on 03-12-2020
- Attended 5th JML Lecture on TINYML: **AI Solution for the Computing Everywhere** by Prof.Manuel Roveri, Italy organised by IEEE CIS/GRSS &, IEEE Hyderabad section on 17-12-2020.
- Attended the lecture on how to represent part-whole hierarchies in neural network in the ACM CODS COMAD Conference from 9:30 am to 10:30am by Geoffrey E. Hinton in B-Block Seminar Hall on

04-01-2021

- Attended the IUCEE Intro Webinar on **Automation of Outcome Based Education Processes & Accreditation Readiness** on 06-01-2020.
- Visited Avantel Pvt.Ltd, Madhapur, Hyderabad on 28-01-2021 for funding project discussion.
- Attended ATAL FDP on **Wearable Devices** from 1st to 5th February 2021 organized by GNITS, Hyderabad.
- Attended Avantel online meeting on 06-02-2021 from 3:00PM to 5:00 PM.
- Attended online JNTUH BOS meeting on 18-02-2021
- Attended webinar on **Building Digital Resilience in Higher Education** by Dr.D.N.Rao, President, VJ from 2:30 PM to 3:45 PM on 26-02-2021.
- Attended IEEE Hyderabad Section SAC / Virtual Event on SB Leadership Interaction Meet 2021 on 07-03-2021.
- Attended as a Guest for virtual inauguration of IEEE Narasaraopet institute of Technology on 15-05-2021.
- Attended the lecture on Regional Meeting on **Deep Learning and Biomedical Signals 2021** organized by IEEE Vardhaman College of Engineering SPS Student Chapter on 15-05-2021 at 11:00AM to 11:45 AM.
- Attended the talk on **"Collaborative and Interdisciplinary Research"** by Dr. K.M.M Rao, Chair, LMAG., IEEE Hyderabad Sec. Deputy Director(rtd), NRSC, ISRO, Former Adjunct Faculty, BITS Hyderabad on 16-05-2021 organised by IEEE Hyderabad Section.
- Attended the CIS Expert lecture on **Towards Contextual Security of AI-enabled platforms** by Dr. Nidhi Rastogi, Research Scientist, RPI by Institute of Electrical and Electronics Engineers (IEEE) Hyderabad Section Joint Chapter of IEEE CIS/GRSS Societies, Hyderabad Section on 22-05-2021 from 06:30 PM to 07:30 PM.
- Attended IEEE Hyderabad Section MTT chapter distinguished Microwave Lecture on **Analog Photonic Systems: Features & Techniques to Optimize Performance** on 29-05-2021 from 6:30PM – 8:30PM.
- Attended Interactive session on **Impact of COVID -19 anxieties and fears - Myths and Facts** on 29-05-2021 from 4.00 PM to 5.00 PM organized by H&S Dept. COVID helpline of VNRVJIET.
- Attended Distinguished Lecture on **Reconfigurable Computing for Cyberphysical Systems** organised by CS IEEE Hyderabad Section on Saturday, May 15, 2021, 6:00 PM
- Attended IUCEE Leader meet on 19-05- 2021 from 5:00 PM - 6:30 PM
- Attended T-Tribe Batch-1 Graduation Ceremony on 22-05-2021 :00from 4 PM to 6 :00 PM.
- Attended IUCEE Cluster on First Year Engineering on 29-05-2021 at 8:00 PM.
- Attended FDP on **Innovation in Telemedicine in Rural India enabled by advancements in Artificial Intelligence , Medical Devices and Internet of Things** ATAL organized by RMK Engineering College from 15th to 19th June 2021
- Attended distinguished lecture program on **State-of-the-art Silicon VLSI: Industrial Face of Nanotechnology** by Dr. Michael Shur on 01-06-2021 from 06:30 PM to 07:30 PM organized by IEEE Hyderabad Section CAS/EDS Joint Society Chapter, supported by IEEE VNRVJIET SB, IEEE MJCET SB, and IEEE Vardhaman SB. The resource person of the program by Dr. Michael Shur
- Attended IETE Hyderabad Centre webinar on **Is it too early to start Research in 6G? Research Trends in 'Beyond 5G' & '6G' Technologies** on 13-06-2021 at 10:30 AM To 12.30 PM by Dr. M H Kori Vice - President, IETE New Delhi, Distinguished Fellow of IETE

### During 2019-20

- One day workshop on **Python** jointly Organized by Prof. Prabhu Ramachandran IITB & ECE, IEEE, ISTE and IETE chapters of VNR VJIET on 22nd June 2019



- Attended as a **BoS Member for Joint Boards of Studies Meetings**, JNTUH, 25th & 26th June 2019
- Workshop on **IOT and Drones** Bennett University, Noida, 26th & 27th January 2019
- Attended FDP on **Artificial Intelligence** ATAL,MNIT from 27th April to 2nd May 2020.
- Attended FDP on **Artificial Intelligence** from 13/5/19 to 18/5/19 at VNRVJIET

## **Academic Contribution and Research & Consultancy**

### **Invited Lectures**

- Speaker and attended the Second Engineering, Medicine, Biology, and Healthcare Research and Innovation Colloquium organised by IEEE Bangladesh Section on 9th June, Wednesday, 5.30 PM to 9.30 PM.
  - Resource Person for 3-Day FDP, J.B.R Engineering College, 05-07-20.
  - Organised and guest for All Hyderabad Women in Engineering Student Congress 2020 held at Geethanjali college of Engineering and Technology on 05-03-2020
  - A webinar on "Overview of Image Processing" to IEEE MVSR WIE AG on May 8, 2020.
  - Delivered Talk on Career Planning & Entrepreneurship for women students at KL Women & Forum in association with WIE, KLEF on 24-09-2020.
  - Chief Guest for inaugural of One Week AICTE & ISTE Sponsored Refresher FDP on Research Methodology: Tools & Techniques from 14.12.2020 to 19.12.2020 Organized by Dept. of ECE, DNR College Of Engineering & Technology, Bhimavaram .
  - Chief Guest for Inaugural of IEEE WIE SVCE Student Branch, SV College of Engineering, Tirupati on 12-02-2021 @ 10.00 AM through online.
  - Delivered guest lecture on Epilepsy detection using wavelet transforms on 11<sup>th</sup> September 2009 at Bio-Medical Department, College of Engineering, OU Campus, Hyderabad.
  - Delivered a lecture on 2-day Short-Term Course on "Image Processing and Current Trends" at IETE center, OU Campus, Hyderabad during 12- 13<sup>th</sup> SEP. 2009, on Image Compression Techniques 13<sup>th</sup> Sep. 2009
  - Delivered a lecture on 2-day workshop on Image Processing and Current Trends during 21-22 August 2010, BITS-Pilani, Hyderabad Campus on Image Compression Techniques.
  - Delivered a lecture on the occasion of 2-day Short-Term Course on "Image Processing and Current Trends" at IETE center, OU Campus, Hyderabad during 19<sup>th</sup> and 20<sup>th</sup> February 2011 on Image Compression Redundancies and their removal method 20<sup>th</sup> Feb. 2011
  - Delivered a Lecture on "Overview of communications" at Malla Reddy engineering college 20<sup>th</sup> February 2012.
  - Delivered Lectures at VNRVJIET in various FDPs/Workshops
  - Delivered Lectures at university of Hyderabad for post graduate Diploma in Telecommunications for the subject Digital signal processing in Telecommunications during 30th Sep-3rd Oct. 2013
  - Delivered classes at University of Hyderabad to the contact program for the Post graduate diploma in Telecommunication (PGDTC), which is scheduled during 12 – 18 Sep., 2014. And delivered six lectures (each of 90 minutes) for the course No DTC-413(Digital Signal Processing) to the participants. The following topics are covered Block- 1: Signals and Systems, Block-2 : Z- Transforms and Discrete Time Fourier Transform Block-3: Digital Filters
  - Delivered Lecture on Role of Wavelet Transforms in Bio-Medical Signal processing on 25<sup>th</sup> Sep. 2014 sponsored by UGC, New Delhi, one week Short Term Course on "Wavelets and its applications" organized by the UGC-Academic Staff College, JNTU Hyderabad during 22-09-2014 to 27-09-2014.
  - Delivered a talk on Internet of Things (one session) on 10th June, 2015, for ISTE Supported
  - One Week Short Term Training Program on Internet & Digital Convergence in India-Crafting the Future Organized by Methodist College of Engineering and Technology, Abids, Hyderabad

during 10-14th JUNE 2015

- Delivered a lecture on Image compression on 7<sup>th</sup> Jan. 2016 (11.00 AM-12.30 PM), 5-Day FDP on Digital Image & Video Processing held during 4<sup>th</sup> to 8<sup>th</sup> January, 2016 at MVSR Engineering College.
- Delivered 2 Lectures during Faculty Development Program on “Recent trends in Signal Processing and Its Applications”, organized by Dept. of ECE, VNRVJIET in collaboration with Electronics & ICT Academy, NIT, Warangal during 22nd June to 1st July, 2017
- Resource Person for 3-Day FDP, J.B.R Engineering College, 05-07-20
- Webinar on Overview of Image Processing to IEEE MVSR WIE AG on May 8, 2020

#### **4.2 Articles/Chapters published in Books**

- G.Vijaya Kumar, Y. Padma Sai, Padmaraju K “Extraction of Wavelet Features for the Classification of Sleep Stages Using Single Channel EEG” Recent Developments in Engineering Research, Book Publisher International, Vol-2 .Indexing: Google Scholar
- Discrete Wavelet Transform Implementation on TMS320c6713 Jointly Published by IEEE and Narosa Publishing Home, 2012, pp 236-240.
- ECG Signal Preprocessing based on Empirical Mode Decomposition, International Conference on Microelectronics Electromagnetics and Telecommunication (ICMEET-2015), 18<sup>th</sup> - 19<sup>th</sup> December 2015. Published by Springer India in Lecture Notes in Electrical Engineering 372, DOI 10.1007/978-81-322- 2728-1\_64, 673-779
- FPGA Based Arrhythmia Detection, 3rd International Conference on Recent trends in Computing-2015 (ICRTC)-2015, Published by Elsevier B.V in Procedia Computer Science Aug. 2015, Vol.57, pp. 970 – 979 (Available online at www.sciencedirect.com), Aug. 2015, DOI: 10.1016/j.procs.2015.07.495.
- Design of Low-Power Binary Content Addressable Memory for Future Nanotechnologies, Microelectronics, Electromagnetics and Telecommunications Proceedings of ICMEET 2017 published in Lecture Notes in Electrical Engineering, Springer, volume-471 , PP 343-348 with ISBN 978-981-10-7328-1 ISBN (eBook) 978-981-10-7329-8
- Design and implementation of low-power MIL-STD-1553B bus controller, Lecture Notes in Electrical Engineering Volume 434, 2018, Pages 183-189, 2nd International Conference on Micro-Electronics, Electromagnetics and Telecommunications, ICMEET 2016; Visakhapatnam; India; 6 January 2017 through 7 January 2017; Code 197979
- Pradeep Kumar, Subodh Srivastava, Y. Padma Sai, “Basic Understanding of Medical Image Processing”, AAP (Apple Academic Press), Taylor and Francis Group Publisher, 02-05-2020
- Vijaya Kumar G, Padma Sai Y, Padma Raju K, “Extraction of Wavelet Features for the Classification of Sleep Stages using Single Channel EEG”, BOOK-CHAPTER- Recent Developments in Engineering Research ,Book Publisher International Aug 2020 PP-150-156, 978-93-90149-19-3, Print  
ISBN: 978-93-90206-87-2, eBook ISBN: 978-93-90206-88-9  
DOI: 10.9734/bpi/rder/v2.

#### **5.3. Books published as author or as editor**

- 7th IEEE International Advance Computing Conference (IACC-2017) proceedings with ISBN No: 978-93-5267-908-9
- 7th IEEE International Advance Computing Conference (IACC-2017) Proceedings

#### **5.4. Projects Guided**

- **UG: 45 Batches**
- Under my guidance Ms.Ch.Meghana, Ms.M.Mrudula, Mr.T.Mahidhar and Mr.P.Nikhil Kumar Students of ECE received Best Student Innovator from AP & TS Engineering

CollegeduringISTE- AP & TS sections 12<sup>th</sup> Annual Convention and Awards Function-2017 on 29<sup>th</sup> December 2017 at AITAM, Tekkali

- 5 of 3<sup>rd</sup> Year ECE students were adjudged as the winners out of 95 students in the college - level Texas Instruments Innovation Challenge –India Analog Design Contest -2014 held at VNRVJIET Hyderabad during 16th Sep – 12<sup>th</sup> Oct 2013. Conducted byTEXAS Instruments India University Program in association with Cranes Software Internal Limited & VNR VJIET Hyderabad. As a Mentor
- 4 of 3<sup>rd</sup> Year ECE students were adjudged as the winners out of 95 students in the college - level Texas Instruments India Analog Maker Competition 2014 held at VNRVJIET Hyderabad during 16th Sep – 12<sup>th</sup> Oct 2014. Conducted by TEXAS Instruments India University Program in association with M/s Starcom Information Technology Limited& VNR VJIET Hyderabad.
- **PG: 35**

### 5.5. Research Interests

- Bio-Medical, Signal and Image Processing, Wavelet Transforms, AI,ML & DL

### 5.6. Ph.D students:

- a) Enrolled : 08
- b) Submitted : 02
- c) **Awarded : 01** (Dr.L.V.Rajani Kumari)

One of the Scholars Vijaya Kumar Gurralla, Asst. Professor, ECE received an amount of Rs.440000/- for UGC Minor Research project titled “Development and Implementation of Atomized system for the detection of the sleep disorders using EEG Analysis.

### 5.7. Papers published in reviewed Journals:

S. No	List of Authors	Title of the Paper	Journal Name Vol.No. PP	ISBN/ ISSN No.	Impact Factor/ Citation Index	National/ International
1	Y.Padma Sai, K.SubbaRao C.Raghavendra Rao, S.SitaJayalakshmi M.D.Koteshwar Rao	EEG Analysis using Chi Square Association metric	IETE Journal of Research, 54(1) 2008, pp73-80	EID: 2-s2.0-72049133412	0.912,(Scopus)	National
2	Y. Padma Sai, K. SubbaRao, C.Raghavendra Rao S.SitaJayalakshmi	Detection of Epileptic Seizures using Wavelet Transform	International Journal of Biomedical Engineering and Consumer Health Informatics, 1(1), 2008, pp. 15-22	ISSN : 0973-6727	1.4	International
3	Y. Padma Sai, K. SubbaRao, C.Raghavendra Rao S.SitaJayalakshmi	Gamma Frequency Range Based EEG Analysis for Epilepsy Detection	International Journal of Medical Engineering and Informatics, Vol. 2, No. 1, 2010, pp 15-25.	Print ISSN: 1755-0653	0.832 (Scopus)	International

4	Y. Padma Sai K. SubbaRao C.Raghavendra Rao S.Sita Jayalakshmi G.Janardhan	DSP Implementation of EEG Analysis Using Discrete Wavelet Transform	International Journal of computational Intelligence and Healthcare Informatics, Vol. 2, No. 2, July-Dec. 2009, pp. 145-151.	ISSN : 0973- 7413	0.0952	International
5	R. DivyaPraneetha Y.Padma Sai Paleti Lakshmi Kanth	Transaction Level Modeling of High Level DMA Controller	Journal of Computing, Vol. 3, Issue 7, July 2011, pp23-28	ISSN 2151- 9617	0.533	International
6	L.V.Rajani Kumari Y.Padma Sai N.Balaji	Intelligent Infrared Target for Training Commandos to Combat Urban Terrorism	International journal of WSEAS Transaction on Signal processing, Vol. 7, Issue 3, July 2011, pp85-91	ISSN 1790- 5052	1.9 (Scopus)	International
7	Y. Padma Sai K. SubbaRao C.Raghavendra Rao S.SitaJayalakshmi T.Mahendra	Discrete Wavelet Transform Implementation on TMS320c6713 Processor for Epilepsy detection	National Journal Jointly Published by IEEE and Narosa Publishing Home, 2012, pp236-240		1.686	National
8	Y.Padma Sai Y.SwethaSree	Design and Implementation of VLSI Architecture for Mixed Radix FFT	International Journal of Scientific and Engineering Research, Vol. 3, Issue 11, Nov.2012	ISSN 2229- 5518	3.2	International
9	Pawar Chander Y.Padma Sai	FPGA Implementation of Discrete Wavelet Transform for Electroencephalo gram Analysis	International Journal of Engineering Research and Applications (IJERA), Vol.3, Issue 1, Jan-Feb2013, pp.618- 621.	ISSN 2248- 9622.	1.325	International
10	V. Priyanka , Y Padma Sai , U Malini and Pawar Chander	FPGA Implementation of Electrooculogra m using Discrete Wavelet Transform	International Journal of Electronics and Communication Engineering. Vol. 5, No. 3 (2012), pp. 304-310	ISSN 0974- 2166		International
11	V.PriyankaBrahmai ah L.DharmaTeja Y.Padma Sai	Study on Comparison of Various Multipliers	International Journal of Electronics and Communication Engineering & Technology. Vol. 4, Issue 5, September –	ISSN 0976 – 6464(P), ISSN 0976 – 6472(O)	Impact Factor (2013): 5.8896 (Calculat	International

			October, 2013, pp. 132-142.		ed by GISI). 1.2456	
12	Padma Sai .Y, Rajesh.K	Design and realisation of Low leakage 1-bit CMOS based Full Adder Cells for Mobile Applications	IOSR Journal of VLSI and Signal Processing (IOSR-JVSP), Vol. 3, Issue 6 (Nov. – Dec. 2013), PP 51-57,	e-ISSN: 2319 – 4200, p-ISSN No. : 2319 – 4197.	1.458	International
13	SafiaShaik, Y.Padma Sai, V.Naveen Kumar	Development of Telugu Text To Speech System on OMAP 3530	IJRIT International Journal of Research in Information Technology. Vol. 1, Issue 12, December, 2013, pp. 194-201	DOI: 10.1109/icitcs.2013.6717827	1.043	International
14	G.Vijaya Kumar Y.Padma Sai V.Naveen Kumar A.Prathibha	Hand Gesture Recognition Using Accelerometer	International Journal of Electrical Electronics and Communication (IJEEC), Vol.5,Issue 30 pp.331-334, Sep-2014	2048-1069	3.86	International
15	Nageshwar V, Y.Padma Sai	Detection of Epileptic Seizures using LabVIEW	International Journal of Advancements in Electronics and Electrical Engineering – IJAEEE, Vol.3, Issue-1 pp.112 – 116, Jan 2014.	ISSN 2319 – 7498		
16	V. Nageshwar, Y.Padma Sai	Design of Brain Machine Interface through LabVIEW'	National Journal of Instrumentation Society of India (ISOI), Vol. 43,Issue No.3Sep 2014, pp3-		1.869	National
17	G.Vijaya Kumar Y.Padma Sai V.Naveen Kumar A.Prathibha	Hand Gesture Recognition Using Accelerometer For Disabled	International Journal of Science, Engineering and Technology Research (IJSETR), Vol. 3, Issue 12, Dec. 2014,pp. 3478- 3481	ISSN 2278 – 7798	2.753	International
18	K.Avinash, Y.PadmaSai V.Naveen Kumar	Implémentation of Text to Speech Synthesis using HMM	International Journal of Science and Research (IJSR), Vol. 4, Issue 3, March- 2015.	ISSN (online) : 2319-7064	4.438	International
19	Y.PadmaSai V.Naveen Kumar, N. Mohan Krishna	On-Board Camera Based on Pedestrian Detection system	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol. 4, Issue 3, March-2015	ISSN (P) : 2320 – 3765 ISSN (O): 2278 – 8875	1.686	International

20	V.Naveen Kumar, Y Padma Sai, C Om Prakash	Design and Implementation of Silent Pause Stuttered Speech Recognition System	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering ,Vol. 4, Issue 3, March-2015	ISSN (P) : 2320 – 3765 ISSN (O): 2278 – 8875	1.686	International
21	L.V.RajaniKumari , Y.Padma Sai, N.Balaji, K.Viswada	FPGA Based Arrhythmia Detection	3rd International Conference on Recent trends in Computing-2015 (ICRTC)-2015, Published by Elsevier B.V in Procedia Computer Science Aug.2015, Vol.57,pp. 970-979	(Available online at <a href="http://www.sciencedirect.com">www.sciencedirect.com</a> )	Google Scholar	International
22	G.Surekha, N.Balaji ,Y.Padma Sai, R.Prashanth Kumar	Design of Low Power 7T SRAM Cell using Low-Vth Transistor	International Journal of Advanced Research in Electronics and Communication Engineering Vol.4, Issue 9, Sep.2015, pp2296-2302	ISSN:2278-909X	Scopus	International
23	Y. Padma Sai, N. Suma Jyostna, L. V. Rajani Kumari, S. V. N Rao, V. Naveen Kumar	Analysis of Cough Sounds for Diagnosis of Respiratory Diseases	7th IEEE International Advance Computing Conference ( IACC-2017)	(ISBN No: 978-93-5267-908-9)	Google Scholar	National
24	L.V. Rajani Kumari, Y.Padma Sai, N.Balaji,	Ardino Based Abnormal Heart Rate Detection and Wireless Communication	International Journal on Cybernetics & Informatics (IJI), Vol. 5, No. 4 August 2016	DOI:10.5121/IJCI.2016.5406	Google Scholar	International
25	L. V. Rajani Kumari, Y. Padma Sai, N. Balaji R Gowrisree	Comparison of Artificial Neural Networks for Cardiac Arrhythmia Classification	International Journal of Advance Engineering and Research Development, Vol. 4, Issue 10, October -2017,	2348-4470(O) 2348-6406(P)	4.72, Google Scholar	International
26	P.Shubha Deepti, S.V.N.Narayana Rao, V.Naveen Kumar, Y.Padma Sai	Expert System using Artificial Neural Network for Chronic Respiratory Diseases	International Journal of Current Engineering and Scientific Research, Vol.4, Issue 9, September 2017	,2393-8394	0.9 Google Scholar	International
27	L.V.Rajani Kumari, Y.Padma Sai,	Real-Time Telemonitoring of Student's	CiiT International Journal of Digital Signal Processing,	(P): ISSN 0974 –	Google Scholar	International

	N.Balaji, R. Gowrisree	Stress Levels using HRV Analysis		9705 & (O): ISSN 0974 – 9594		
28	G. Surekha, N. Balaji Y. Padma Sai	Design of Low- Power Binary Content Addressable Memory for Future Nanotechnologies	Microelectronics, Electromagnetics and Telecommunications Proceedings of ICMEET 2017 published in Lecture Notes in Electrical Engineering, Springer, vol.471 ,PP 343-348	ISBN 978-981- 10-7328- 1 ISBN(eB ook) 978-981- 10-7329- 8	Google Scholar	International
29	V.Priyanka Brihmaiah, Y.Padma Sai, M.N.Giri Prasad	Implementation and analysis of an electrooculography(EOG) signal on FPGA	International journal of advanced engineering research and technology, Vol.5, Issue 1 1, PP.901-907 November 2017	2348- 8190	Google Scholar	International
30	L. V. Rajani Kumari, Y. Padma Sai, N. Balaji	SVM to Classify Mental Stress in Driver's Using HRV Analysis	CiiT International Journal of Automation and Autonomous System, Vol 9, No 9, November -Dec. 2017	ISSN: 0974 – 9551	Google Scholar	International
31	V. Nageshwar, P. Prashanth Reddy and Y. Padma Sai	Model based Spike detection of Epileptic EEG data by using LabVIEW	Journal of Emerging Technologies and Innovative Research (JETIR) December 2017, Vol. 4, Issue 12, PP.300-304	ISSN- 2349- 5162	Google Scholar, 5.87	International
32	G.Vijaya Kumar, Y.Padmasai ,K.Padmaraju	Artefact Removal from Sleep Hypnograms using complete Ensemble Empirical Decomposition with Adaptive Noise	IJST Volume-10, Issue- 47 Dec, 2017	0974- 6846	Wed Of Science, G oogle Scholar	International
33	V.Priyanka Brahmaiah, Y.Padma Sai, M.N.Giri Prasad	Performance and Analysis of EOG Signal through Eye Movements	Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 14- Special Issue, 2018	ISSN 1943- 023X	Google Scholar	International

34	V. Nageshwar, and Y. Padma Sai	A Novel Method for Analysis and Classification of EEG Signals using Empirical Mode Decomposition and Hilbert Marginal Spectrum	Journal of Engineering Technologies and Innovative research Volume:5, Issue:10, ISSN -2349-5162, Page no.181-189, October 2018	2349- 5162	2.5	International Open Access Journal
35	L. V. Rajani Kumari, Y. Padma Sai, N. Balaji	Performance Evaluation of Neural Networks and Adaptive Neuro Fuzzy Inference Systemfor Classification of Cardiac Arrhythmia	International Journal of Engineering & Technology, 7 (4.22) (2018) 250- 253	e-ISSN : 0975- 4024 p- ISSN : 2319- 8613		International
36	G.Vijaya Kumar,Y.Padmasai ,K.Padmaraju	Wavelet Domain Extraction of Features from single channel Sleep EEG	IJITEE Volume-8 Issue- 4S2 March, 2019	2278- 3075	5.15	International
37	G.Surekha,N.Balaji and Y.Padma Sai	“PVT Variations and Process Corners for a Low Leakage Power 7T SRAM cell	International Journal of Research In Electronics and Computer Engineering, Vol. 7 Issue 2,PP:2771-2774, April-June 2019,	ISSN:239 3 9028 (PRINT)  ISSN: 2348- 2281 (ONLIN E)		
38	Nageshwar V, Y.Padma Sai and .K.Subba Rao,	“Epileptic Seizure Detection using Orthogonal Local Preserving Projection and K-Nearest Neighbors Classifier”	International Journal of Control and Automation, Vol. 12, No. 5, (2019), pp. 299- 313.			
39	Nageshwar V, Y.Padma Sai and K.Subba Rao,	“Epilepsy detection in EEGusing firefly based feature selection and random forest classifier”	International Journal of Control and AutomationVol. 12, No.5, (2019), pp. 314- 326			



40	Gowri sreeRudraraju , ShubhaDeeptiPalreddy, BaswarajMamidgi , Narayana Rao Sripada , Y. Padma Sai, Naveen Kumar Vodnala and Sai Praveen Haranath,	“Cough sound analysis and objective correlation with spirometry and clinical diagnosis”,	Informatics in Medicine Unlocked 19 (2020) 100319, ELSEVIER Journal			
41	Konda Nandini, V. Naveen kumar, Y. Padma Sai,	“Real Time Traffic Signs and Obstacle Detection in Self Driving Car”,	International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-6, April 2020	ISSN: 2278-3075	Retrieval Number: D1936029420/2020©BE IESP DOI: 10.35940/ijitee.D1936.049620, Published By: Blue Eyes Intelligence Engineering & Sciences Publication	
42	Pallavi Polsani, V. Priyanka B., Y. Padma Sai	Design & Verification of Serial Peripheral Interface (SPI) Protocol,	J-International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-6, March 2020,	ISSN: 2777-3878, Impact Factor 4. pus, Google Scholar		
43	G.Vijaya Kumar, Y. Padmasai, K. Padmaraju	A Novel Single Channel EEG based Sleep Stage Classification using SVM	IJBET In press	1752-6426	In press	International
44	V. Priyanka B, Dr. Y. Padma Sai and Dr. M. N. Giri Prasad	A New Framework for Recognizing Normal and Epileptic Seizure from Eye Movement Signals using Genetic Based Convolutional Neural Network	International Information and Engineering Technology Association (IIETA) Vol. 37, No. 3, pp. 493-501	ISSN: 0765-0019 (print) 1958-5608 (online),		International
45	Srihari M, V. Priyanka B, Y. Padma Sai	Mayday, A Women Safety Device	American Scientific Publishers (ASP) Vol. 10, 14-Special Issue	ISSN 1943-023		International

			Pg No: 2039-2045 March 2020			
46	Pallavi P, V. Priyanka, Y. Padma Sai	Design and Verification of SPI Protocol	International Journal of Recent Technology and Engineering, Vol. 8, Issue 6 March 2020,	ISSN:22 77- 3878		International
47	Pradeep Kumar, Subodh Srivastava, Y. Padma Sai	Reformation of Modified Complex Diffusion Method For Removal of Rician Noise From Breast MRI Images	Revue d'Intelligence Artificielle  28-06-2020	ISSN 1958- 5748		International
48	Pradeep Kumar, Subodh Srivastava, Ritesh Kumar Mishra, Y Padma Sai	End-to-end improved convolutional neural network model for breast cancer detection using mammographic data, Defense Modeling and Simulation: Applications, Methodology, Technology	SCIE  P.No:1-10, 08-12-2020	1548-512		International
49	Nageshwar V, Dr.Y.Padmasai	Feature extraction method for epileptic seizure detection based on cluster Coefficient distribution of complex network	National Symposium on Instrumentation (NSI- 42) 28th -29th Dec 2020			International
50	Vijaya Kumar Gurrala, Padma Sai Y, Padmaraju K	Detection of Sleep Apnea Based on the Analysis of	Traitment Du Signal 2 nd March 2021			International

		Sleep Stages Data Using Single Channel EEG				
51	L.V.Rajani Kumari, Y. Padma Sai & N. Balaji	R-Peak Identification in ECG Signals using Pattern-Adapted Wavelet Technique	IETE Journal of Research, 8 th March, DOI: 1080/03772063.2021.18932292021			International
52	Mohebbanaaz, L. V. Rajani Kumari and Y. Padma Sai	Nearest Neighbor Classifier	Intelligent Systems ( Proceedings of ICMIB 2020) Springer 20-04-2021 PP: 349-359			International
53	P. S. S. Sree Dhruti, L. V. Rajani Kumari and Y. Padma Sai	An Inference Engine Integrated with Health Parameters for Medical Web Platform	Intelligent Systems ( Proceedings of ICMIB 2020) Springer , 20-04-2021, PP: 373-381			International
54	Vijaya Kumar Gurralla, Padmasai Yarlagaadda, Padmaraju Koppireddi	Detection of Sleep Apnea Based on the Analysis of Sleep Stages Data Using Single Channel EEG	Traitement du Signal, Vol:38 Issue:2 P.No:431-436, 30-04-202	ISSN 0765-0019(Print)		International
55	Mohebbanaaz, L. V. Rajani Kumari and Y. Padma Sai,	Nearest Neighbor Classifier, ,	Intelligent Systems ( Proceedings of ICMIB 2020) Springer 20-04-2021 PP: 349-359			International
56	P. S. S. Sree Dhruti, L. V. Rajani Kumari and Y. Padma Sai	An Inference Engine Integrated with Health Parameters for Medical Web Platform	Intelligent Systems (Proceedings of ICMIB 2020) Springer , 20-04-2021, PP: 373-381			International

### 5.8. Papers presented at National / International Conferences:

S. No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Data Acquisition System for the analysis of Sleep Disorders	International Conference on Systemics, Cybernetics and Informatics, Pentagonam Research Centre, Hyderabad	International	4-8 <sup>th</sup> January 2006
2	EEG analysis using Principal Component Approach	14 <sup>th</sup> IEEE International conference on Electronics, Circuits and Systems, Marrakech, Morocco	International (Scopus)	11-14 <sup>th</sup> December 2007
3	Detection of Epileptic Seizures using Wavelet Transform	International symposium on Global Trends in Biomedical Informatics Research, Education and Commercialization, Chennai	International	11-12 <sup>th</sup> January 2008
4	APT Wavelet Transform for spike detection in EEG signals	IEEE Conference on AI Tools in Engineering, MaharshiKarveStreeShikshanSanstha's Cummins College of Engineering for Women, Pune	International	6 - 8 <sup>th</sup> March 2008
5	Discrete Wavelet Transform Implementation on TMS320c6713 Processor for Epilepsy detection	International conference on Electronic Design and Signal Processing (ICEDSP-09)" MIT, Manipal	International	10 <sup>th</sup> to12 <sup>th</sup> December 2009
6	Linear Prediction Modelling for the Analysis of the Epileptic EEG	International Conference on Advances in Computer Engineering (ACE-2010) Bangalore	International	June 21-22, 2010
7	ECG Signal Processing Using LabVIEW	International Conference on Bio-Signals, Images and Instrumentation	International	March 14-16 <sup>th</sup> 2013
8	On-Board Wireless Data Acquisition System and Telemetry,	2013 International Telemetering Conference (ITC 2013), Bally's, Las Vegas, Nevada, USA	International (Scopus)	October 21 - 24, 2013
9	Detection of Epileptic Seizure using LabView	International Conference on Advances in computing, Electronics and CommunicationACEC-2013,at Zurich, Switzerland	International	Oct.12-13 <sup>th</sup> , 2013
10	Development of telugu text to speech system using OMAP 3530	2013 International Conference on IT Convergence and Security, ICITCS 2013, Article number 67178272013 3rd International Conference on IT Convergence and Security, ICITCS 2013; Macau; China; 16 December 2013 through 18 December 2013; Category numberCFP1391W-ART; Code 102708.	International (Scopus)	December 2013
11	Telugu Text to Speech System for Mobile Based Systems	Fifth International Conference on Recent Trends in Information, Telecommunication and Computing – ITC 2014 is organised by	International	Mar 21-22, 2014

		the Association of Computer Electronics and Electrical Engineers (ACEEE) and sponsored by the Indian Society for Technical Education (ISTE), Chandigarh		
12	3-Channel ECG Analyzer	International Conference on Communication and Computing (ICC - 2014) ,ICC-2014 is published by Elsevier	International	12- 14th June 2014
13	Speech Emotion Recognition by MFCC Coefficients and Support Vector Machines	First International Conference on Large Area Flexible Microelectronics ILAFM2014 organized by R.V.College of Engineering, Bengaluru	International	18-20th Dec.2014
14	FPGA Based Arrhythmia Detection,”	3rd International Conference on Recent trends in Computing-2015 (ICRTC)-2015	International (Scopus)	12 <sup>th</sup> -13 <sup>th</sup> March-2015
15	Low Leakage CNTFET Full Adders	IEEE Global Conference on Communication Technologies (GCCT-2015)	International (Scopus)	23-24 <sup>th</sup> April 2015
16	ECG Monitoring system using ARM9 Web-Server	IEEE Global Conference on Communication Technologies (GCCT-2015)	International (Scopus)	23-24 <sup>th</sup> April 2015
17	Multi-Channel Data Acquisition System for Electroencephalogram Using LabVIEW	National Symposium on Instrumentation (NSI-40). Organized by ISOI, Bangalore and Dept. of EIE, Kumaruguru College of Engineering, Coimbatore, October 3 <sup>0th</sup> & 3 <sup>1st</sup> 2015, page no.156.	International	October 3 <sup>0th</sup> & 3 <sup>1st</sup> 2015
18	Spike Detection in Electroencephalogram (EEG) Using Arduino UNO	2015 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), 978-1-4673-9825-1/15/\$31.00 ©2015 IEEE, Noorul Islam University, Kumara coil, Kanyakumari Dist., Tamilnadu, Dec. 18 <sup>th</sup> & 19 <sup>th</sup> 2015, page no. 652-654.	International (Scopus)	December 18 <sup>th</sup> & 19 <sup>th</sup> 2015
19	ECG Signal Preprocessing based on Empirical Mode Decomposition	International Conference on Microelectronics Electromagnetics and Telecommunication (ICMEET-2015), 18 <sup>th</sup> -19 <sup>th</sup> December 2015 . Published by Springer India in Lecture Notes in Electrical Engineering 372, DOI 10.1007/978-81-322- 2728-1_64,673-779	International (Scopus)	18 <sup>th</sup> -19 <sup>th</sup> December 2015
20	Implementation of speech based stress level monitoring System	4th International Conference on Computing, communication and sensor Network (CCSN-2015),	International	December 24 <sup>th</sup> -25 <sup>th</sup> ,2015
21	Cough classification tool for early detection and recovery monitoring of tuberculosis and asthma	4th International Conference on Computing, communication and sensor Network (CCSN-2015),	International	December 24 <sup>th</sup> -25 <sup>th</sup> ,2015
22	Performance Trace Suite Reduction using Clustering Techniques	4th International Conference on Computing, communication and sensor Network (CCSN-2015),	International	December 24 <sup>th</sup> -25 <sup>th</sup> ,2015

23	Design of Data Acquisition System for Remote EEG System and EEG Analysis in LabVIEW	6th IEEE International Advance Computing Conference (IACC-2016) Organized by IEEE Computer Society - India Council & S R K R Engineering College, Bhimavaram, India	International	February 27-28, 2016
24	Stability Analysis of 7T-SRAM Cel	10 <sup>th</sup> International Conference on Intelligent Systems and Control (ISCO 2016), organized by Karpagam college of Engineering, Coimbatore, 7-8 <sup>th</sup> Jan. 2016, Proceedings of the 10 <sup>th</sup> International Conference on Intelligent Systems and Control, ISCO 2016, 31 October 2016, Article number 772713810 <sup>th</sup> International Conference on Intelligent Systems and Control, ISCO 2016; Coimbatore; India; 7 January 2016 through 8 January 2016; Category number CFP1687T-ART; Code 124691.	International (Scopus)	January 2016
25	Design of 2nx2mx1 Random Access Memory using Reversible Logic	2016 IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology, RTEICT 2016 - Proceedings 5 January 2017, Article number 7807961, Pages 913-917 1 <sup>st</sup> IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology, RTEICT 2016; Sri Venkateshwara College of Engineering (SVCE) Campus Bangalore; India; 20 May 2016 through 21 May 2016; Category number CFP16F77-ART; Code 125896.	International (Scopus)	May 2016
26	Design and Implementation of High Performance MIL-STD-1553B Bus Controller	7th IEEE International Advance Computing Conference (IACC-2017, VNRVJIET, Hyderabad (DOI:10.1109/IACC.2017.98))	International (Scopus)	5-7 <sup>th</sup> Jan-2017
27	Design and Implementation of Remote Terminal for MIL-STD-1553 B			
28	Aadhaar Based Biometric Attendance System Using Wireless Fingerprint Terminals			
29	Data Acquisition System Of Electro oculogram			
30	Design and implementation of low-power MIL-STD-1553B bus controller”,			

		Telecommunications, ICMEET 2016; Visakhapatnam; India; 6 January 2017 through 7 January 2017; Code 197979		
31	EEG Spike detection using Wavelet Transform	Medical Council of India & Indian Council of Medical Research (Meditel-06), Centre for Digital Health, Amrita Institute of Medical Sciences, Kochi	National	24-26th November 2006
32	Analysis of EEG using Maximum Likelihood Estimate	IETE Zonal seminar on "Emerging and Converging Communication Technologies" (SECT-07), The Institute of Electronics and Telecommunication Engineers, Visakhapatnam centre, Visakhapatnam	National	11th February, 2007
33	EEG analysis by Evaluating Performing Index	National conference on Bio-Medical Engineering, Manipal Institute of Technology, Manipal	National	4-6th October 2007
34	FPGA Implementation of Triple Data Encryption Algorithm for Data Security	National Conference on Advances in Signal Processing (NCASP - 09) Andhra University, Visakhapatnam	National	20-21 November 2009
35	Design of Brain –Machine Interface Through LabVIEW	National Symposium on Instrumentation - NSI-38 Organized by ISOI, Bangalore and Dept. of IT, E&C, E&E, B.V.B.CET, Hubli, Karnataka, page no.178. Oct-13	National	October - 2013
36	Street Light Data Acquisition using VLSI Based Object Recognition	IEEE International Conference on Computational intelligence and Computing Research, ( DOI:978-1-5090-0612-0/16 IEEE Digital Library)2016 IEEE International Conference on Computational Intelligence and Computing Research, ICCIC 2016 4 May 2017, Article number 79196882016 IEEE International Conference on Computational Intelligence and Computing Research, ICCIC 2016; Agni College of Technology, Chennai; India; 15 December 2016 through 17 December 2016; Category number CFP1620J-PRT; Code 127661	International (Scopus)	December 2016
37	An Interactive System for Paralyzed Patients Based on Eye Blink	IEEE(EDS) Kolkata chapter Sponsored 4th International Conference on Computing, Communication and Sensor Network	International	24-25 Dec 2015
38	"Street Light Data Acquisition using VLSI Based Object	IEEE International Conference on Computational intelligence and Computing Research,		December 2016

39	Wavelet Domain Extraction of Features from single channel Sleep EEG	International Conference on Advances in Signal Processing, Power, Embedded, Soft Computing, Communication and Control Systems (ICSPECS-2019)	International	11-12 Jan 19
40	Nageshwar V, Dr.Y.Padmasai, Dr.K.Subba Rao	Detection of Epileptic Seizures in Long-Term Human EEG by Improved Linear Discriminant Analysis	4th International Conference on Advanced Informatics for Computing Research	26th Dec2020
41	Naaz, <b>Y.Padma Sai</b> , L.V. Rajani Kumari	A Review on Arrhythmia Classification using ECG Signals	2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCECS 2020 )	22nd & 23rd Feb 2020
42	G. Surekha, Dr. N. Balaji, Dr.Y. Padma Sai	A Low Leakage Power Binary CAM design using increased substrate bias 7T SRAM cell	International Conference on Advances in Communications, Computing and Embedded Systems (ACCES-2020) 13:978-81-930222-9-0	18-19 <sup>th</sup> Sep.2020
43	G. Surekha, Dr. N. Balaji, Dr.Y. Padma sai	Designing of 64 K Bit SRAM Using Increased Substrate Bias 7T SRAM cell	International Conference on Advances in Communications, Computing and Embedded Systems	18-19 <sup>th</sup> Sep.2020



			(ACCES-2020) 13:978-81-930222-9-0	
44	Vijaya Kumar G, Padma Sai Y, Padmaraju K & VH Praneeth Srinivasula	A review on analysis of sleep EEG signals	4th International Conference on Electronics, Communication and Aerospace Technology (ICECA2020)	4th International Conference on Electronics, Communication and Aerospace Technology (ICECA2020)
45	PradeepKumar-Asst.Prof, Subodh Srivastava & Y.Padma Sai	Optimal Bayesian Estimation Framework for Reduction of Speckle Noise from Breast Ultrasound Images	International Conference on Innovation in Cyber Physical Systems (ICIPS-2020)	22nd to 23rd October 2020

### 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant Amount (Rs.)	Ongoing /Completed
1	Staff Development Program on Real Time Signal & Image Processing	AI CTE	1 Year (06- 18 June 2011)	4.86 Lakhs	Completed
2	Industry Institute Partnership Cell	AI CTE	2010-2012	10Lakhs	Completed
3	Upgradation Advanced Digital Signal Processing and Processors	AI CTE	2012-13	9.0Lakhs	Completed
4	Faculty Development Program on "VLSI Design"	AI CTE	2012-13	4.91Lakhs	Completed
5	Faculty Development Program on Real Time Embedded System Development	AI CTE	2012-13	4.80Lakhs	Completed
6	Upgradation of VLSI and ECAD Lab	AI CTE	2012-13	9.45Lakhs	Completed
7	Travel Grant sanctioned by Science and Engineering Research Board (SERB)	DST	2013-14	1.19Lakhs	Completed

8	Travel Grant sanctioned by University Grants Commission	UGC	2013-14	But not utilized	Completed
9	Design and Development of System for ECG Waveform Characterization and Processing	AICTE	2013-2016	8.25Lakhs	Ongoing
10	Virtual Assistant for Mobile devices using Voice and Gesture Technologies	MieTy	2013-2018	18.14Lakhs	Ongoing
11	Digital Health Advisory System for Chronic Respiratory Diseases	BIRAC – Biotechnology Ignition Grant(BIG ) Scheme	20-12-2018	45.6 Lakhs	Ongoing
12	Cough and Wheeze analyzer for Respiratory Digital Health Services	Biotechnology Industry Research Assistance Council (BIRAC – Soch)	19-03-2018	15.00 Lakhs	Ongoing
13	Digital Health Advisory System for Chronic Respiratory Diseases	IISc - MSME Center of Excellence	29-01-2018	6.75	Ongoing
14	Upgradation of Advance Embedded Systems and IoT laboratory	AICTE	04.01.2019	15 .0	Ongoing
15	4 Day-Summer School on Internet of Things for Biomedical and Healthcare Applications	IEEE SPS Chapter	14-11-2019	<b>\$5000</b>	Ongoing
16	Digital Health Startup Grant from Bioincubator at C-CAMP. Bioincubator at C-CAMP,a G2C Incubation Centre under the Ministry of Electronics & IT, Govt of India TIDE 2.0 Scheme	Salcit Technologies		7 Lakh	Ongoing

### 5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
1	Design and Development of Mill Standard 1553IP Core	M/s Ananth Tech Pvt. Ltd.Hyderabad	2 Year	Rs.4.24 Lakhs	Completed
2	Design Of an FFT/IFFT IP-Core	MMRFIC Technology Pvt Ltd	1 Year	Rs.2 Lakhs	Ongoing
3	Frequency band analysis of acoustic signals for health care”	Salcit Technologies Pvt.	1 Year	Rs.10,00,000/	Ongoing

### 6. Awards / Honors received:

- Cofounder of SALCIT TECHNOLOGIES PVT LTD
- Awarded 2020 IEEE SPS Summer School on “Internet of Things for Biomedical and Healthcare Applications” and sponsored \$3K and successfully conducted the program from 28th December -31st December 2020
- Published Two patents and one awarded by Indian Patent office
  1. One of the inventors of the patent titled method for characterization of subject’s attention and meditation using BCI for real time healthcare monitoring published on 29-05-2021
  2. Another on "Brain-Computer interfacebased system and method for characterizing behaviour state of a subject”. ( 20-12-2019)
  3. One patent was awarded Application No.201741045066A in March 2019 titled “Method and System for Analyzing Risk Associated with Respiratory Sound”
  4. Filed Canada Patent (Application No. 3083639) Method and system for analyzing risk associated with respiratory sounds
  5. Filed USA (Application No.17/081149) Method and system for analyzing risk associated with respiratory sounds
  6. SALCIT TECHNOLOGIES is one of 3 finalist at the 11th Aegis Graham Bell award 2020 in the category of COMBAT COVID-19 with Artificial Intelligence
- Received outstanding Branch Councilor award from IEEE Hyderabad Section during AGM on 24<sup>th</sup> January, 2021
- Received Best WIE Affinity Group award for IEEE WIE Hyderabad section as Vice-chair on 19-01-2020 from IEEE Hyderabad Section
- As a branch councillor IEEE Student Branch of VNR VJIET has got approval to start Signal Processing Society (SPS) and Circuits and System Society (CASS) on 12 February, 2020.
- IEEE Hyderabad Section has announced IEEE student branch of VNRVJIET as “Vibrant Student Branch Award” on 10<sup>th</sup> Aug.2019
- As a Chair WIE AG received R10 Women in Engineering Outstanding Section Affinity Group Award: IEEE Hyderabad Section WIE Affinity Group in recognition and appreciation of valuable services and contributions.
- Online Certification on Neural Networks and Deep Learning (4 Weeks) from Coursera
- Online Certification on AI for Medical Diagnosis from Coursera
- Certification from NPTEL 8 week course on VLSI Signal Processing Feb-Apr 2020

- Got ELITE and Topper of 5% in this course for the 12 week course on “Introduction to Machine Learning” conducted by NPTEL during Jan-April 2018.
- Got ELITE for the 12 week course on “Deep Learning” conducted by NPTEL during June - Oct 2018.
- Received “Uthama Acharya Puraskar” National Award for impact creators in Engineering Education in commemoration 150th of Birth Anniversary Celebrations of Mahatma Gandhi by Indian Servers at VRSiddhartha Engineering College, Vijayawada on 02-10-2019
- Received Professor of the year (Bio-Medical) from Ideal Teaching Awards program ITAP-2018 on 02-10-2018 at Hotel Trident( Ball Room ), Hitech City, Hyderabad
- Received the Best Engineering College Teacher, award from ISTE A.P and T.S section during 10th ISTE AP&TS Section Annual Convention and Awards Function- 2015 held at Kurnool On 29<sup>th</sup> Dec , 2015.
- Received Silver Medal for the project Cough and Wheeze Analyze from IT Minister Mr.N.LokeshIndian at Innovators Association, AP & Innovation Society and International Innovation Fair Association held at Vishakhapatnam
- Bronze medal from China Association of Inventions to Sri S.V.N. Narayana Rao, Dr.Y.Padma Sai, V.Naveen Kumar & M.Baswa Raj (III.CSE student) for their innovation `Cough and wheeze analyzer for respiratory digital health services'
- Received BIRAC BIG grant for Salcit Technologies Pvt Ltd incubator of VJ HUB , project titled Digital Health Advisory System for Chronic Respiratory Diseases
- Awarded Gold Medal by Korean Intellectual Property Office(KIPO ) &Korea International Women Invention Exposition (KIWIE-2019) as women entrepreneur of Salcit Technologies Private Limited, 23-06-2019
- Special prize for creative invention Yongmaan park,Chiramn of the Korea Chamber of Commerce and Industry, Korea ,23-06-2019
- One of the recommended candidate for Research award for the academic year 2014-16 by UGC, New Delhi
- Short listed for Research Award (2012-14) by University Grants Commission 9th Oct.2013
- 2 Out of 6 ideas are selected for Seoul international invention Fair-2016.
- Received certificate from United Inventors Association of the USA for innovative Excellence for“CSA-BOT, A Device for Cognitive Status Assessment”.

7. **Motto:** Let us make things happen instead of waiting for things to happen