Personal Information

Name	Dr. J Naga Vishnu Vardhan
Years of Experience	Teaching: 18 Years
Email Id	vishnu.j@bvrithyderabad.edu.in
Areas of Specialization	Signal Processing and Communications



Educational Qualifications

Doctoral Degree	Ph.D.	ECE – Signal Processing
PG Degree	M.Tech.	Communication and Radar Systems
UG Degree	B.E.	Electronics and Communication Engineering

Funded Projects

1. DST Project under TIDE

Medicine Recognition System and Alerting device for geriatrics and visually challenged"

No: SEED/TIDE/043/2013 Dt: 21st July 2015.

File No.: SEED/TIDE/043/2013 Dt: 21st July 2015.

Total Project Cost Rs: 38,57,000/-

2. Microsoft

Precision Agriculture – AI For Earth

File.No: AI4E-2262-RG59-21100412 Dt:10-04-2021

Grant: Azure Grants -10000 USD

Patents Published:

- 1. "Smart Clothing for Patients" Application number 201641024774. 2018
- 2. A portable medicine identification and alerting system for visually challenged people and Geriatrics Application number 202141011491, 2021

Papers Published

International Journal Publications

1. J. Naga Vishnu Vardhan, Dr. P. G. Krishna Mohan "Minimum Variance Power Spectral Estimation of Noisy Signals with Improved SNR" Published in Dec 2013, Volume 2, Number 3. International Journal of Advances in Engineering and Technology, ISSN: 2319 - 1120 Pg. No: 341-349

International Conference Publications

- 1. S. Madhavi, Sanjay Dubey, J. Naga Vishnu Vardhan, "Optimal Placement of wireless sensor networks for Structural Health monitoring" at IEEE International conference on Smart Structures and Systems Feb 2016 at Saveetha Engineering College, Chennai.
- 2. J. Naga Vishnu Vardhan "Smart Clothing for Hand Fractured People" International Conference on Entrepreneurship and Technology on 3rd & 4th March 2018 at BVRIT Hyderabad College of Engineering for Women.
- 3. J. Naga Vishnu Vardhan, Ankita Datla, Antra Devulapalli, Akshitha G, Sumathi Bairi "Smart Biometric Lock with security features" 3rd International Conference on Intelligent

- Computing and Advances in Communication, ICAC-2020, November 25-26, 2020, Organized by Department of Electronics and Communication Engineering, ITER, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India and received **Best Paper Award**
- 4. J Naga Vishnu Vardhan "Adaptive Security System for Electronic Devices" India International Science Festival –Young Scientist conference 2020 on 23rd Dec 2020 jointly organized by ministry of science and Technology, Ministry of Earth sciences, Ministry of Health and Family welfare
- 5. J Naga Vishnu Vardhan, Ramesh Deshpande, Sai Priyanka, Sreeya Bhupathiraju, K Padma Mayukha and A Keerthi Reddy, "E- Dictionosauraus" 7th International conference on Information System Design and Intelligent Applications INDIA 2022, 25th & 26th February 2022 organized by BVRIT HYDERABAD College of Engineering for Women in association with Springer.
- 6. B Sanjeev Reddy, Sanjay Dubey, J.Naga Vishnu Vardhan, "Performance Evaluation of Radar Backscatter of S-Shaped Duct with Conventional Intake Duct" -7th International conference on Information System Design and Intelligent Applications – INDIA 2022, 25th & 26th February 2022 organized by BVRIT HYDERABAD College of Engineering for Women in association with Springer.

National Journal Publications

1. Dr. P. G. Krishna Mohan, J. Naga Vishnu Vardhan "Computational Complexity: A Comparison of Radix-2, Radix-4, and Split-Radix Algorithms", published in July 2008 Issue in "Technology Spectrum – Journal of JNTU".

National Conference Publications

- 1. Dr. P. G. Krishna Mohan, J. Naga Vishnu Vardhan, "Non-Parametric Methods of Power Spectrum Estimation"—National Conference on Emerging Trends in Engineering and Technology, held on May 5th 2007, organized by ISTE of Saintgits College of Engineering Chapter, Kerala.
- 2. Dr. P. G. Krishna Mohan, J. Naga Vishnu Vardhan "Comparison of Various Techniques of Power Spectrum Estimation w.r.t Bias and Variance"—, 23rd National Convention of Electronics and Telecommunication Engineers, held on October 28- 29th 2007, organized by The Institute of Engineers (India), Local Centre, Pune.
- 3. J. Naga Vishnu Vardhan "Study of Resolution in Power Spectral Estimation using Non-Parametric methods for Noisy signals "-, South Zone Student Research Convention, Anveshan, and Phase-I held on 17-18 March 2008 jointly organized by JNTU College of Engineering, Hyderabad in association with Association of Indian Universities, New Delhi.
- 4. Dr. P. G. Krishna Mohan, J. Naga Vishnu Vardhan, "A New Denoising Technique for Narrow Band Signal Detection in Noisy Environment" National Conference on Advances in Signal Processing (NCASP-09) during 20-21st November 2009 jointly organized by Dept. of ECE, Andhra University, Visakhapatnam, Blekinge Institute of Technology, Sweden and IETE Local centre, Visakhapatnam.

FDP's Conducted

1. One week International faculty development program on Wireless Communications and Mobile Technologies in association with Qcares, Qualcomm from 6th to10th July 2020

2. A three day workshop on "AI on EDGE Computing "was conducted by IIC BVRITH, BVRIT HYDERABAD College of Engineering for Women in association with GRIET Team under GRIET's Corporate Social Responsibility Scheme from 8th to 10th March 2021

FDP's Attended

- 1. Two Day faculty development program on Real time applications of communication theory organized by BVRITH in association with Q cares team of Qualcomm on 8th & 9th July 2017 organized at VEDIC.
- 2. Three Day workshop on Leadership in Teaching and Learning held at VEDIC, Aziz Nagar, Hyderabad from 31st July to 2nd August 2018.
- 3. Two Week faculty development program on Entrepreneur Ship organized by NSTEDB at BVRIT Hyderabad College of Engineering for Women from 18th to 30th March 2019.
- 4. Three Day faculty development program on Professional Etiquette and Emotional Intelligence organized by Department of BS & H, BVRIT Hyderabad College of Engineering for Women from 8th to 10th July 2019.
- 5. Three Day Faculty Development Program on Machine Learning and Its Applications organized by BVRIT HYDERABAD College of Engineering for Women from 28th to 30th September 2019.
- 6. One week faculty development Program on Advancement in Communication Engineering Technologies with Simulation Tools organized by Dept. of ECE, VIT Bhimavaram from 1st to 5th July 2020
- 7. 2020 IUCEE Annual Leadership Summit -Enhancing Institutional Excellence of Engineering Education organized by IUCEEE from10th to12th July 2020
- 8. National Webinar on "Intellectual Property Rights (IPR) for Startups, Academicians and Research Scholars by ESCI, Hyderabad on 14th & 15th July 2020.
- 9. IIC online sessions conducted by Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28thApril to 22nd May 2020
- 10. AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 2021-2-8 to 2021-2-12 at University of Hyderabad.
- 11. NITTT Orientation Training Programme for Mentors" (One week in ONLINE MODE) from 1–5 February, 2021
- 12. AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence Impacts on Telemedicine" from 2-6, August 2021organized by GRIET
- 13. IIC Innovation Ambassador Training Program (Advanced Level) 30th June to 30th July organized by MoE's Innovation Cell and AICTE

Professional Memberships:

Member of IAENG with No: 167555

Certifications

- 1. Principles of Communication Systems-I organized by NPTEL during Jan Apr 2018
- 2. Introduction to Wireless and Cellular Communication organized by NPTEL during June Oct 2018
- 3. Life Skills for Engineers (Level-I) from May 15 to June 28, 2018 and Life Skills for Engineers (Level-II) from Nov 6 Dec 20, 2018 organized jointly by the Commonwealth Educational Media Centre for Asia (CEMCA) and University of Hyderabad (UOH) and got certificate of Competence

- 4. R-Programming A-Z: R for Data Science with Real Exercises from Udemy April 2020
- 5. Design Thinking for Innovation from Coursera April 2020
- 6. AI for Everyone from Coursera May 2020
- 7. Smart Device and Mobile Emerging Technologies from Coursera June 2020
- 8. AI Chat bots without Programming from Edx July 2020
- 9. Complete guide to build IoT things from scratch to market from Udemy June 21, 2021

Any Other Achievements

Awards Received

- 1. Mentor for Project "Ex-Voice" and participated in Smart India Hackathon 2017 under the ministry of Department of empowerment of persons with intellectual disabilities on 1st and 2nd April 2017. Developed an app by name "Ex-Voice" for differently abled people like deaf, dumb to communicate easily over phone. Awarded with **Inspirational Award** and got cash prize of Rs. 30,000
- 2. Received Excellent Teaching Practices Award in Faculty Colloquium organized at VEDIC
- 3. 3rd International Conference on Intelligent Computing and Advances in Communication, ICAC-2020, November 25-26, 2020, Organized by Department of Electronics and Communication Engineering, ITER, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India and received **Best Paper Award**

Invited Talks (Resource Persons)

Faculty Sessions

- Guest Lecture on "Applications of Signal Processing Using MATLAB" in Two Day workshop on "MATLAB Applications" organized by TKR Engineering College, Hyderabad during 27th & 28th August 2011
- 2. Guest Lecture on "Power Spectrum Estimation of Random Signals" in Six Day National Level workshop on "Statistical Analysis of Signals and Image" organized by GNITS, Hyderabad during 30th Nov to 5th Dec 2015.
- 3. FDP on Signals and Stochastic Processes organized by Academic Audit Cell, JNTUH on 9th & 10th March 2017
- 4. FDP on Digital Signal Processing organized by Academic Audit Cell, JNTUH on 12th December 2017.
- 5. Invited as a resource person for three week refresher course on Systems and Signal Processing held from 6th to 27th March 2019 and delivered a lecture session on Multistage Implementation and Multirate Signal Processing organized by UGC-HRDC, JNTUH on 12th December 2017.
- 6. Invited as a resource person for Two Week online Refresher Course on Systems and Signal Processing held from 1st to 16th March 2021 and delivered a lecture session on Random Process Spectral Characteristics on 6th March 2021 and on Multirate Signal Processing Multistage Implementation and organized by UGC-HRDC, JNTUH on 12th March 2021

Student Sessions

1. Guest Lecture on "Satellite Communications" in the month of November, 2004 at IETE Local Centre, Vijayawada.

- 2. Guest Lecture on "Signal Processing Tool Box in MATLAB" in Two Day National Level workshop on "MATLAB TOOLS" organized by Arjun Institute of Technology and Sciences, Hyderabad during 7th & 8th February 2011.
- 3. Guest Lecture on "Signal Processing Using MATLAB" in One Day National Level Workshop on MATLAB and its Applications" 20th October 2011 organized by Dept. of ECE, Vidya Vikas Institute of Technology, Hyderabad.
- 4. Guest Lecture on Signals & Systems at Gurunanak Inst. of Technology on 28th October 2014.
- 5. Guest Lecture on Digital Signal Processing at KG Reddy College of Engineering and Technology on 26th February 2019
- 6. Guest Lecture on "Introduction to Communications and Signal Processing at ANITS, Rajampeta on 4th June 2021

Conferences Organized

- 1. National Conference on Recent Trends in Communication Technologies and VLSI Design RTCTV-2010 on 2nd-3rd June 2010, Sponsored by BRNS, Mumbai and DRDO, New Delhi Jointly organized by Dept. of ECE & R and D Centre, Vardhaman College of Engineering.
- 2. National Conference on Emerging Trends in Communications and Signal Processing NCECS-2011 on 12th -13th October 2011, Sponsored by BRNS, Mumbai and DRDO, New Delhi organized by Dept. of ECE, Vanjari Seethaiah Memorial Engineering College, Hyd.
- 3. 2nd National Conference on Emerging Trends in Communications and Signal Processing NCECS on 27th & 28th February 2013, Sponsored by DRDO, New Delhi, Jay Robotix, Hyderabad and Prolific Systems and Technologies, Hyderabad organized by Dept. of ECE, Aurora's Seethaiah Engineering College, Hyd.
- 4. International Conference on Micro-Electronics, Electromagnetics and Telecommunications
 ICMEET on 9th & 10th September 2017. It is technically sponsored by Springer LNEE series and organized under IETE and ISTE Student chapters
- 5. 7th Series of International Conference on Information System Design and Intelligent Applications INDIA 2022 on 25th & 26th February 2022. It is technically sponsored by Springer –Lecture Notes in Networks and Systems

Reviewer for International Conferences

- 1. 7th IEEE International advance computing conference IACC 2017
- 2. International Conference on Soft Computing and Signal Processing ICSCSP 2019
- 3. 3rd International Conference on Intelligent Computing and Advances in Communication, ICAC- 2020