


Profile

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|---|-------------------|---|----------------------|---------------------------|---|-----------------------|
| Name of the Faculty | | Dr. V. Ratna Kumari | | |  | |
| Designation | | Assistant Professor | | | | |
| Department | | Electronics and Communication Engineering | | | | |
| Date of Birth | | 17.06.1984 | | | | |
| DOJ the Institution | | 23.06.2005 | | | | |
| Employee ID | | ECE060150 | | | | |
| Address for communication | | D.No 1-64, Behind Vijaya Lakshmi Theater, Kankipadu, Krishna - 521151 | | Permanent Address | D.No 1-64, Behind Vijaya Lakshmi Theater, Kankipadu, Krishna -521151 | |
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| AICTE Unique ID | | 1-454503237 | | | AAPAR ID: 686202115381 | |
| Education Qualifications | | UG | PG | Ph.D | Others | |
| | | B.Tech. | M.Tech | Ph.D | | |
| Work experience | | Teaching | Research | | Industry | Others |
| | | 19 years | | | | |
| Area of Specialization | | Communications and Signal Processing | | | | |
| Courses taught at Under Graduate/ Post Graduate Level: (full course title only) UG: DSP, STLD, EDC, EMTL, PDC, POC, DCS, PTSP, DIP, DICA, Introduction to MATLAB, MPMC, NA PG: THEM, TT | | | | | | |
| Professional Memberships & ID's : IETE-M-234484, ISTE-LM 65874 | | | | | | |
| Research Publications & Guidance | National Journals | International Journals | National Conferences | International Conferences | Patents | Books / Book chapters |
| | - | 16 | | 4 | 1 | 2 |
| | Masters | 3 | | - | | |

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| <p>Details of Paper Publications (In IEEE Format only Descending order)</p> | <p>Journals:</p> <p>SCI:</p> <ol style="list-style-type: none"> 1. Kumari, V.R., Kumar, P.R. & Kumari, B.L., “A Novel Optimized Deep Network for Ear Detection and Occlusion Analysis”, Wireless Personal Communications, Aug 2023, vol. 131, Issue 3, ISSN No: 1572-834X , Pages 1721–1743 (2023). https://doi.org/10.1007/s11277-023-10519-9. 2. Ratna Kumari Vemuri, Pundru Chandra Shaker Reddy, B S Puneeth Kumar, Jayavadevel Ravi , Sudhir Sharma , Sivakumar Ponnusamy, “Deep learning based remote sensing technique for environmental parameter retrieval and data fusion from physical models”, Arabian Journal of Geosciences; ISSN: 1866-7511; Vol:14; Issue:13; Pg No:1230; June’2021. <p>Scopus:</p> <ol style="list-style-type: none"> 3. Ratna Kumari Vemuri, Chinni Bala Vijaya durga, Syed Abuthahir Syed Ibrahim, Nagaraju Arumalla, “Intelligent of things multiagent systems for smart home energy monitoring”, Indonesian Journal of Electrical Engineering and Computer science, June 2024, Vol. 34, Issue:3, pp: 1858-1867. 4. Vutukuri Sarvani Duti Rekha, Swarupa Rani Bondalapati, Ratna Kumari Vemuri, Ramarao Gude, ”new Services And Applications Can Leverage The Power Of Low Reliable And Latency Communication For Mission Critical Distributed Industrial Internet Of Things”, Journal of Theoretical and Applied Information Technology, pp. 5029-5036, Vol. 101, No. 12, June 2023, ISSN: 1992-8645. 5. Kumari, V. & Rajesh Kumar, Panakala & Kumari, B., “Design and implementation of Ear recognition System using DM6437”, NeuroQuantology, May 2022, Volume 20, Issue 5, Page 4359-4366. <p>Scopus Book Chapters:</p> <ol style="list-style-type: none"> 6. V.RatnaKumari, S.Srinivasa Kumar and P.Rajesh Kumar ‘Occluded Ear Recognition using block based PCA’, Book Chapter in Advances in Intelligent Systems and Computing Book Series 898, Vol.2, ISSN:2194-5365, Pages:569-578, February – 2019. 7. Y. Ramakrishna, V. Ratna Kumari and P. V. Subbaiah, "A Novel Adaptive Beamforming Algorithm for smart antennas," Book Chapter in Advances in Intelligent Systems and Computing Book Series (AISS, Vol. 898), Springer Singapore, pp. 589-597. doi: https://doi.org/10.1007/978-981-13-3393-4_60/ ISBN: 978-981-13-3392-7, Publisher: Springer Singapore, Feb 2019. <p>Others:</p> |
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1. Kumari, V. & Rajesh Kumar, Panakala & Kumari, B., "A Novel ear Detection Technique in Noisy Environment using Mean Structure Similarity Index Measure" , International Journal of Engineering Applied Sciences and Technology, April 2022, Vol. 6, Issue 12, ISSN No. 2455-2143, Pages 141-145.
2. Y. Ramakrishna, V. Ratna Kumari, "Remote Monitoring of Perishable Goods using IoT", Journal of Instrumentation and Innovation Sciences, pp. 22-26, Vol. 7, No. 1, January 2022, e-ISSN: 2456-9860.
3. Y. Ramakrishna, V. Ratna Kumari, "Covid-19 Prediction Using Machine Learning Algorithms", Journal of Instrumentation and Innovation Sciences, pp. 27-33, Vol. 6, No. 2, August 2021, ISSN: 2456-9860.
4. V.Ratna Kumari, "MSP430 Lunch Box Based Smart Irrigation System", International Research Journal of Innovations in Engineering and Technology (IRJIET); ISSN: 2581-3048; Vol:5; Issue: 4; Pg No: 79-82; Apr'2021.
5. V. Ratna Kumari, Y. Ramakrishna, Kiran Kumar Gangavarapu and Ch. Amarnatha Sarma, "Human Acoustic Voice Controlled Robot Using LabView and Arduino", Journal of Green Engineering, pp. 2982-2997, Vol. 11, No. 3, March 2021, ISSN: 1904-4720 (Print); 2245-4586 (Online).
6. Ch. Amarnatha Sarma, Syed Iyntyaz, B.T.P. Madhav and V.Ratna Kumari et al.'Interdigital Filtenna with Bandpass Filter, DGS and Inset Feed Elliptical Antenna for S-Band & ISM2.4GHz Band Applications', Turkish Journal of Physiotherapy and Rehabilitation; ISSN: 2651-4451; Vol:32; Issue:2 ; Pg No: 2923; Mar'2021.
7. V. Ratna Kumari, "A Robust Ear Recognition System", JETIR, Vol:5; Issue-12; Pages:102 – 106; December – 2018.
8. Sayyad Imthiyaz and V Ratna Kumari, "ECG Signal Noise Compression Using FFT, DCT and DWT", International Journal of Research in Computer and Communication Technology, Vol. 4, No. 11, November 2015, pp. 1031-1036. ISSN: 2320-5156.
9. Swathi Loya and V Ratna Kumari, "PAPR Reduction Method in OFDM System by Using Combined CAZAC Matrix Transform and Companding Technique", International Journal of Scientific Research and Education, Vol. 2, No. 12, December 2014, pp. 2593-2597. ISSN: 2321-7545.
10. Anirudh Boddapati and V Ratna Kumari, "A Novel Approach to Reduce Average Spectrum Distortion in Pitch Alteration Technique Using Gaussian Method", International Journal of Engineering Research and Applications, Vol. 3, No. 06, November/December 2013, pp. 2009-2012. ISSN: 2248-9622.
11. Y. Ramakrishna, P.V. Subbaiah and V. Ratnakumari, "Analysis of Statistical Path Loss Models for Mobile Communications",

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| | <p>International Journal of Computer and Network Security, Vol. 2, No. 10, October 2010, pp. 13-17. ISSN: 2076-2739.</p> <p>12. Y. Ramakrishna, P.V. Subbaiah and V. Ratnakumari, "Smart Antenna Strategies for Advanced Wireless Communication Systems", Proceedings of the International Conference on Emerging Trends in Signal Processing and VLSI Design (SPVL-2010), Hyderabad, June 2010.</p> <p>Conferences:</p> <ol style="list-style-type: none"> 1. Ratna Kumari Vemuri, Vemu S V S S Anandamai, Vatturi Prasanna Ganesh," Integration of Non- Decimation and PCA in Wavelet Based Multi-Band Ear Recognition", ICCCNT, June 2024. 2. V Ratna Kumari, B Bala venkateswara Gupta, D naveen, "Social Distance Monitoring", International Conference on Recent Advancements and Innovations in Computing, Communications and Information Technology, April 2022. 3. V.Ratna Kumari, P.Siva Sanjay," Smart Surveillance Robot using Object Detection", International conference on Communication and Signal processing,Aug 2020. 4. Y. Ramakrishna, V. Ratna Kumari and P. V. Subbaiah, "Hybrid adaptive beamforming algorithms for smart antennas," 2017 IEEE 6th International Conference on Computer Applications in Electrical Engineering-Recent Advances (CERA), IIT Roorkee, Oct. 2017, pp. 117-122. doi: 10.1109/CERA. 2017. 8343312. |
| Details of Patents Published / Granted | <p>Patent No: 202023104870.6</p> <p>Title: A Real Time Ear Biometric System</p> <p>Year of Grant: 2023</p> <p>Authority: German Patent and Trade Mark office</p> |
| Details of Certification Courses / Workshops / STTP's / FDP (participated / organized) | <p>Participated:</p> <ul style="list-style-type: none"> • Online FDP on AI for communication and signal processing applications organized by E & ICT Academy, NIT Warangal from 3.02.2025 to 13.02.2025. • Online FDP on AI for Engineering Applications organized by PVPSIT and NITTTR from 4.11.2024 to 8.11.2024 • Online FDP on Microstrip Patch Antenna Design Techniques and Tools organized by PVPSIT and NITTTR from 16.09.2024 to 20.09.2024. • Online FDP on IoT and Embedded systems organized by PVPSIT and NITTTR from 23.09.2024 to 27.09.2024. • Online FDP on NEP 2020 Orientation & Sensitization Programme organized by MMTTC, Osmania University, Hyderabad, Telangana |

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| | <p>from 19.07.2024 to 27.07.2024</p> <ul style="list-style-type: none"> • Online FDP on Graphics and Animation through Open Source Tools for making MOOCs organized by PVPSIT and NITTTR from 19.08.2024 to 23.08.2024. • Online FDP on Industry 4.0/5.0 organized by PVPSIT from 15.04.2024 to 27.04.2024 • Online FDP on 5G and Beyond organized by PVPSIT and NITTTR from 5.02.2024 to 9.02.2024 • Online FDP on AI/ML and Data Science for Industry 4.0 organized by PVPSIT and NITTTR from 29.01.2024 to 2.02.2024 • Online FDP on Neural Networks and Fuzzy Logic organized by PVPSIT and NITTTR from 21.08.2023 to 1.09.2023 • Online FDP on Medical Image Processing organized by E & ICT Academy, NIT Warangal from 22.08.2022 to 2.09.2022 • Online FDP on Trends in Embedded systems and IoT organized by SRGEC from 20.6.2022 to 25.06.2025 • Online FDP on Outcome based curriculum-Design and implementation by NITTR, Kolkata from 2.08.2021 to 13.08.2021 • Online FDP on Artificial Intelligence organized by IIT Roorkee from 12.07.2021 to 16.07.2021 • Online FDP on Deep Learning organized by IIITM Gwalior from 5.07.2021 to 9.07.2021 • FDP on NI myRio FPGA organized by PVPSIT from 18.01.2021 to 20.01.2021 • Online FDP on Reserch trends in Image processing with machine learning & Deep learning organized by G. Pulla Reddy Engineering College from 21.07.2020 to 25.07.2020 • FDP on Phython Programming organized by APSSDC from 18.05.2020 to 30.05.2020 |
| Details of Projects Applied / Awarded | <ul style="list-style-type: none"> • Minor Research Project Titled “ Design and Development of Embedded Ear Recognition System”, F. No. 4-4/2014-15 (MRP/UGC-SERO) November 2014 of worth Rs. 4,50,000.00 • Seminar Grant for “Mathematical Challenges in Medical Image Processing”, File No. 7-296/ RIFD/SG/Policy-1/2013-14/Date29.07.2013 of worth Rs.1,40,000.00 |
| Any Other information | |

