Name of Faculty	Dr.D.Sony
Designation	Assistant Professor
Nature of Job/Appointment	Contract
Date of Joining	3rd July 2019
E-mail	sonyd_ece@cbit.ac.in

Education Qualifications	Name of the Degree	Class
Ph.D.	Doctor of Philosophy (ECE)	Awarded
PG	M.Tech (VLSI System Design)	First with Distinction
UG	B.Tech (ECE)	First with Distinction

Work Experience	
Teaching	14 Years
Research	--
Industry	--
Others	--
Area of Specialization	Digital Design, Embedded Systems, GNSS
Academic Identity	Scopus Id: 57209745707 Researcher Id: ABE-3865-2020 Orcid Id: 0000-0002-4595-2844
Professional Memberships	IAENG membership (Member No: 322711)
Responsibilities held at Institution Level	_
Responsibilities held at Department Level	➢ Coordination of UG/PG Best Projects selection and activities related to Institute funded students projects. ➢ In charge for Student Attendance registers for UG and PG Programs ➢ Member, Course Expert Group ➢ Member, Common Course Committee ➢ Coordinator AME/HD/CT
Research Guidance	Guided 05 M.E projects
Awards Received	Received Best Paper award in 2021
Courses Handled at Under Graduate / Post Graduate Level.	Digital Design, Microprocessors &Microcontrollers, Embedded System Design using RTOS, Linear Integrated Circuit and Applications, Signals and Systems. Electronic Devices and Circuits, Microprocessors & Microcontrollers Lab, Linear Integrated Circuit and Applications Lab, Electronic Devices and Circuits Lab.
No. of Papers Published	National Journals – -- International Journals – 12 National Conference – 03 International Conference –06
Projects Carried out	----
Patents	----
Technology Transfer	----
Invited Speaker	A guest Lecture on Signals and Systems at KG Reddy College of Engineering and Technology on 15th November 2021.
No. of Books/Chapter Published with details	-----

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized).

1. 3-Day Webinar on Signal Processing Techniques for Radar Applications, organized by "Institute Of Aeronautical Engineering", on 10th , 12th and 14th July 2020.
2. One week National level online FDP on "Cyber Security ", organized by CBIT & MGIT in association with Supraja Technologies during 7th -12th July, 2020.
3. One week online FDP on "Future Nano Electronic Devices and Circuits", organized by MGIT during 6th -10th July, 2020.
4. One week FDP on"Outcome Based Education and NBA Accrediation Process during 28th May- 1 st Jun 2020.
5. Five Day STTP on "MATLAB basedTeaching-Learning in Mathematics, Science & Engineering" organized by RamraoAdik Institute of Technology, Nerul, NaviMumbai in collaboration with DesignTech Systems Pvt. Ltd.,Mumbai during 18th to 22nd May 2020.
6. A Two Day National Webinar on "Artifical Intelligence and Machine Learning" organized by Loyola Academy, Secunderabad during 20th -21st,May 2020.
7. A One Week Faculty Development Program on "Recent Trends in Advanced Communications" organized by Department of Electronics and Communication Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram, during 4th -9 th ,May 2020.
8. Completed NPTEL online Certification Course on " NBA Accrediation and Teaching –Learning in Engineering" during JanApr 2020.
9. Attended One week refresher Course on " Recent trends in VLSI Design" by Department of ECE, NIT Meghalaya during 27 th Sept -1 st Oct 2021.
10. Attended "One week Asian regional workshop on SciTinyML: Scientific Use of Machine Learning on Low-Power Devices" organized by ICTP, Italy during 6th-10th June 2022.
11. Attended a 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 11th July to 15thJuly 2022.
12. Co-coordinator for A One week FDP on " Research Opportunities in Image Processing and Machine Learning", conducted by the Department of Electronics and Communication Engineering, Chaitanya Bharathi Technology, Institute of during 29th June to 03rd July 2020.

Details of Journal Publications/ Conferences

International Journal publications

International Journals: 12

1. Sony, D., Reddy, D.K. & Kumar, P.N. SIS Error Estimation for Fault Detection of IRNSS Using Beeline Method. International Journal of Aeronautical and Space Sciences, July, 2023. (SCIE, Scopus, Q2 journal.) https://link.springer.com/article/10.1007/s42405-023-00644-x, IF: 1.7.
2. Sony, D. , Reddy, D.K. & Kumar, P.N. Implementation of receiver autonomous integrity algorithm for fault detection of IRNSS. Aerospace Systems Volume: 5, 635–642 (2022). https://doi.org/10.1007/s42401-022-00161-x , IF: 1.16. (Scopus, Q3 journal).
3. Devalapally, Sony, Desireddy, Krishna Reddy and Perumalla, Naveen Kumar. "Integrity monitoring of NavIC by parsing broadcast ephemeris" Journal of Applied Geodesy, vol. 18, no. 1, 2024, pp. 43-49. https://doi.org/10.1515/jag-2023-0026 (Scopus, Q2 journal). IF: 1.
4. D.Sony, D.Krishna Reddy, P.Naveen Kumar, "IRNSS RINEX Data Processing", Journal of Data Acquisition and Processing, 2023, Vol-38 , issue 1 pp : 5138-5147, January 2023. (Scopus, Q4 journal). http://sjcjycl.cn/article/view-2023/5138.php, IF : 0.1.

5. D Sony ; N Krishna Sandeep Reddy ; R V Krishna Sathvik ; Palle Vivek Goud(2021)," A Smart Parking System Using M2m Communication", International Journal Of Electrical Engineering And Technology, Volume 12, Issue 5, May 2021, pp. 109-115.(SCOPUS INDEXED). https://www.doi.org/10.34218/IJEET.12.5.2021.010, IF : 1.5

6. D. Sony, P. Keerthi, O. Aditya & N. Sravya," Simulation and Performance Analysis of Interleave Division Multiple Access (IDMA) in Comparision with Code Division Multiple Access (CDMA)", Asian Journal of Applied Science and Technology (AJAST), Volume 5, Issue 2, Pages 90-94, April-June, 2021. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3874604. IF: 5.9.

7. M. Udaya, D. Sony, D. Krishna Reddy(2020), "Design of IRNSS Tracking System using 1.5 bit ADPLL and Correlator", The *International Journal of Innovative Technology and Exploring Engineering* , Volume 09 issue 10, pp 413-420. DOI: 10.35940/ijitee.J7582.0891020, IF : 1.6.

8. D.Sony, (2018), "Design of High speed fixed and reconfigurable FIR filter for speech signal processing", International Journal of Advance Engineering and Research Development, Volume05 issue 01, pp 136-148. IF : 6.08

9. D.Sony, (2018), "Real-time Scene Text Detection via Connected Component Clustering and Non-text Filtering in videos, International Journal of Advance Engineering and Research Development, Volume 05 issue 02, pp 801-806.

10. D.Sony, (2018), "Comparison of Wallace, Vedic and Dadda Multipliers", International Journal of Advance Engineering and Research Development, Volume 05 issue 03, pp142-151. IF : 6.08

11. D.Sony, B.Ramu, (2018), "An adaptive image resolution enhancement by using multi resolution transfom", International Journal Of Creative Research Thoughts, Volume 06 issue 01,pp1235-1251. IF : 7.9.

12. D.Sony, M.Krishna, (2018), "Motion Deblurr", International Journal of Advance Engineering and Research Development, Volume 05 issue 03, pp 801-806. IF : 6.08

International Conferences: 6

1. D. Sony, G. Ajitha and Taaha, "Evaluating Phase Error of IRNSS using Narrow Correlator," 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT), Delhi, India, 2023, pp. 1-6, doi: 10.1109/ICCCNT56998.2023.10306679.**(IEEE)**

2. D. Sony, D. K. Reddy and J. B. Farheen, "Implementation of Code Tracking Loop using Narrow Correlator for GNSS," *2022 Trends in Electrical, Electronics, Computer Engineering Conference (TEECCON)*, Bengaluru, India, 2022, pp. 25-28, doi: 10.1109/TEECCON54414.2022.9854845.**(IEEE)**

3. D.Sony, S. Chadravardan, Dr.D. Krishna Reddy, Dr.P.Naveen Kumar," Satellite Selection Algorithm for RAIM Applications", "International Conference On Emerging Trends In Circuit1 -Branch Technologies And Applications(2021).

4. D. Sony, JB Farheen, Dr. D. Krishna Reddy and Dr.P. Naveen Kumar, "Integrity Monitoring of GNSS using Ztest" , "International Conference On Emerging Trends In Circuit1 -Branch Technologies And Applications(2021).

5. D.Sony, Dr.D.Krishna Reddy ,Dr.P.Naveen Kumar , "Statistical Characterization of IRNSS Satellite Clock Error for Receiver Autonomous Integrity", Third International Conference Soft Computing and Signal Processing" (ICSCSP-2020).

6. D. Sony, V. Satya Srinivas, P. Naveen and D. Krishna Reddy, "IRNSS User Range Accuracy Evaluation for Receiver Autonomous Integrity", URSI Asia-Pacific Radio Science Conference (AP-RASC) (2019).**(IEEE)**

National Conferences: 3

1. D.Sony, P.Naveen Kumar and D.Narsing Rao," A Comprehensive Approach to Integrity Monitoring through Broadcast Ephemeris of NavIC", National Space Science Symposium (2024), organized by ISRO at Goa University, Goa .

2. D. Sony, JB Farheen, Dr. D. Krishna Reddy, P. Raj Reddy, S. Rajireddy, "Design of Code Tracking Loop using Narrow Correlator for GNSS", "Recent Trends in Engineering and Technology-2021 (RTET-2021).(Received best paper award).

3. D. Sony, D. Krishna Reddy, P. Naveen and V. Satya Srinivas (2019), "IRNSS and GPS Satellite User Range Accuracy Analysis for Receiver Autonomous Integrity Monitoring", National Space Science Symposium (2019), organized by ISRO at Pune University, Pune.

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