




K. S. INSTITUTE OF TECHNOLOGY

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Faculty Name	Dr. ELECTA ALICE JAYARANI A	
Designation	ASSOCIATE PROFESSOR	
Educational Qualification	B.E, M.E, Ph.D.	
Experience in Years	18 YEARS	
Areas of Interest	SIGNAL PROCESSING	
E-mail	electalice@gmail.com	

Educational Details

Examination/ Degree	College / University	Year of Passing
Ph.D.	Reva University	Jan 2023
ME	Mepco Schelenk Engg. College / Madurai Kamaraj University, Tamilnadu, India.	April 2003
BE	VLB Janakiammal college of Engg & Tech, /Bharathiyar University, Tamilnadu, India.	April 2001

Publications

1. **Journal Publications:** Electa Alice Jayarani A., Bhagyalakshmi V., Reegan J, (2023), “ **Lexicon Based Sentimental Analysis using R**”, Journal of Harbin Engineering University, Vol. 44 No. 9 (2023): Issue 9, 319 – 324.
2. <https://harbinengineeringjournal.com/index.php/journal/article/view/1280>
3. Appadurai, E. A., Bhatt, M. R., & D.D., G. (2020). “**Semi Fragile Audio Crypto-Watermarking based on Sparse Sampling with Partially Decomposed Haar Matrix Structure**”, Acta Cybernetica, 24(4), 679-697. <https://doi.org/10.14232/actacyb.280899>
4. Electa Alice Jayarani.A, Mahabaleswara Ram Bhatt , Geetha. D.D. (2020). “**Developing the Compressive Sensing Basis Matrix by Employing the Music Key as a Watermark and Acquire the Audio Signal**”. *International Journal of Advanced Science and Technology*, 29(05), 2492 - 2498.
5. Electa Alice Jayarani.A, “**A Survey On Copyright Protection Of Audio Signals And Study On The Robustness And Performance Assessment Factors**”, Journal of Critical Reviews ISSN-2394-5125 Vol 7, Issue 7, 2020, 112-119, doi: [10.31838/jcr.07.07.18](https://doi.org/10.31838/jcr.07.07.18)
6. “**Audio Watermarking Based on Compressive Sensing**”, at Journal of Advanced research in Dynamical and control systems, Vol. 11, 02-Special Issue, 2019, 1654-1659, ISSN: 1943-023X.
7. “**An Introduction To Sparse Sampling On Audio Signal By Exploring Different Basis Matrix**”, at Advances in Intelligent Systems and Computing, May 2019, ISSN: 2194-5357.
8. “**DCT Based Compressive sensing for Audio Signal Acquisition**”, at International Journal of Pure and Applied Mathematics, Volume 119, no14, 2018, 111-114, ISSN: 1314-3395.

9. **“Zero watermarking on Audio Based on STFT”**, accepted to get published at IEEE Digital Explore.
10. **“On Sparse Audio Data watermarking by Exploiting Haar Transform Structures”** at IEEE Digital Explore, doi: 10.1109/ICAIECC.2018.8479528.
11. **“Manipulating the absolute phase of Audio to embed a watermark for robustness against compression”**, at International Journal of Science, Engineering & Technology, ISSN (O): 2348-4098 , ISSN (P): 2395-4752, 2017.
12. **“Twitter Based Automation with Security and Safety System”**, at International Journal of Science, Engineering & Technology, ISSN (O): 2348-4098 , ISSN (P): 2395-4752, 2017.
13. **“Analyzing the Audio Watermarking Schemes and Features”** at International Journal of Research in Engineering and Technology, volume 5, Special issue 04, may 2016.
14. **“A CSI Adaptive Optimal Relay Network Design Based on PN –SNR For MIMO Networks”**, at International Journal of Research in Engineering and Technology, volume 5, Special issue 04, may 2016.
15. **“Design of High Performance Low Power MUX using Circuit Level Optimization in Cadence”**, at International Journal of Research in Engineering and Technology, volume 5, Special issue 04, may 2016.
16. **“Design of 4-bit Non –Volatile SRAM using Magnetic Tunnel Junction”** at International Journal of Research in Engineering and Technology, volume 5, Special issue 04, may 2016.
17. **“Converge Casting in wireless sensor Network through ALBA-P protocol”**, at International Journal of Engineering Research & Technology- IJERT, volume 3, Issue 19, 2015.
18. **“Providing Enhanced Reliability using Reactive Protocol for wireless Sensor network”**, at International Journal of Engineering Research & Technology- IJERT, volume 3, Issue 19, 2015.

Conference Papers :

1. **“An Introduction to Sparse Sampling on Audio Signal by Exploring Different Basis Matrix”** at International Conference on Artificial Intelligence and data Engineering (AIDE 19) at NMAM Institute of Technology, Nitte, Karnataka on 23-24th May 2019.
2. **“DCT Based Compressive sensing for Audio Signal Acquisition”**, at International Conference on Applied Engineering Sciences and Management (ICAEM-2018) at K.S.School of Engineering and Management, Bengaluru on 12-13 Oct 2018.
3. **“Zero Watermarking On Audio Based on STFT”** at 2018 International Conference on Computing, Electronics & Communications Engineering (iCCECE) at University of Essex, Southend, London on 16-17th Aug 2018.
4. **“On Sparse Audio Data watermarking by Exploiting Haar Transform Structures”** at 2018 Second International Conference on Advances in electronics, Computers and Communications (ICAIECC -2018) at Reva University, Bengaluru on 9-10th Feb 2018.
5. **“Analysing the Audio Watermarking Schemes & Features”**, at the International Conference on Engineering, Science, management and Advances in Research Technology – ICESMART -16 at T.John Institute of Technology, Bengaluru on 5 – 6th May 2016.
6. **“Watermarking on various multimedia data”** the International Conference on Engineering, Science, management and Advances in Research Technology – ICESMART -15 at T.John Institute of Technology, Bengaluru on 29 – 30th April 2015.
7. **“Blind Audio Watermarking based on EMD and DCT”** at The International Conference on trends in Engineering –ICMACE-14 at Tamizhan college of Engineering, Tamilnadu, India on 19 - 20th February 2014.
8. **“MATLAB Simulink Design model for Detection of Abandoned Objects”** at the International Conference on Convergence of Science, Engineering and Mangament-ICCSEM2013 at Dayansagar College of Engineering, Bangalore, India on 26-27th September 2013.

Patents Filed :

1. AUSTRIAN PATENT

Title of the Invention: A System Monitoring For Harvesting Of Farming Using Drone Technology
Application Number: 2020101843

Status: Granted

2. UK PATENT

Title: Hybrid Electric Pole

Design number: 6288963

Status: Granted

3. INDIA PATENT

Title: Drone seed replants trees to keep forest healthy

Application number: 202241061051

Status: Published

4. INDIA PATENT

Title: DIY Power Bank with Plasma Lighter

Application number: 202341030798A

Status: Published

Awards

Professional Membership

- Life Member of Indian Society of Technical Education
- Full time Professional Member of International Association of Educators and Researchers (IAER)

Contact Details

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