

Name and Designation: Dr.K.Swaraja

Email ID: kswaraja@gmail.com

Educational Details: B.Tech (ECE), JNTUA, Anantapur, AndhraPradesh

M.Tech (Digital Electronics and Communication Systems), AITS, Rajampet, AndhraPradesh

P.hD (Image Processing), JNTUH, Hyderabad, Telangana

Professional Background:

- Presently working as **Professor**, Department of ECE in Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Bachupally, Hyderabad, from (2014 till date).
- Worked at Malla Reddy Engineering College(MREC), Secunderabad (8 Years) as **Associate Professor**, during (2006-2014).
- Worked at Annamacharya Institute of Technology & Science (AITS), Rajampet (5 Years) as **Assistant Professor**, during (2001-2006).

Committee Work: External lab Exams Co-ordinator, NBA, NAAC 6th Criteria Co-ordinator, IIT Bombay spoken tutorial co-ordinator.

Courses Taught:

UG Level:

Digital Image Processing
Cellular & Mobile Communications
Digital Communications
Digital signal processing
Signals and systems
Electronic Circuit Analysis
Linear Integrated Circuits & Analysis
Switching Theory & Logic Design
Communication Theory
Analog Communications
Principles of Communication
Radar Engineering
Digital Integrated and circuits applications

PG Level:

Image and video processing
Advanced Data Communications
Coding Theory and Techniques

PUBLICATIONS:

International Journals:

1. Swaraja, K., Meenakshi, K. and Kora, P., 2020. An optimized blind dual medical image watermarking framework for tamper localization and content authentication in secured telemedicine. *Biomedical Signal Processing and Control*, 55, p.101665. **(SCIENCE CITATION INDEX EXPANDED)**
2. Kuraparathi, S., Kollati, M., Kora, P. (2019). Robust optimized discrete wavelet transform-singular value decomposition based video watermarking. *Traitement du Signal*, Vol. 36, No. 6, pp. 565-573. <https://doi.org/10.18280/ts.360612>. **(SCIENCE CITATION INDEX EXPANDED)**
3. Kora, P., Meenakshi, K., Swaraja, K., Rajani, A., & Islam, M. K. (2019). Detection of Cardiac arrhythmia using fuzzy logic. *Informatics in Medicine Unlocked*, 17, 100257. **(SCOPUS INDEXED)**
4. Leelavanthi, C., Padmavathi, K., Swaraja, K., Meenakshi, K., & Samson, M. IoT Based Smart Surveillance System for Healthcare Monitoring using Raspberry PI, *IJTEE*, 2019. **(SCOPUS INDEXED)**
5. Rakesh, G., Kora, P., Swaraja, K., Meenakshi, K., & Karuna, G. Gsm Based Face Recognition using Pir Sensor on Raspberry Pi 3, *IJTEE 2019* **(SCOPUS INDEXED)**
6. Yasasvy, T., Sushil, K. V., Meenakshi, K., Swaraja, K., & Kora, P. A Hybrid Blind Watermarking With Redundant Discrete Wavelet and Hadamard Transform, *IJTEE 2019* **(SCOPUS INDEXED)**
7. Sandeep, K., Kora, P., Swaraja, K., Meenakshi, K., Pampana, L.K., ECG classification using machine learning, *International Journal of Recent Technology and Engineering*, 2019. **(SCOPUS INDEXED)**
8. Swaraja K, Meenakshi K, Padmavathi kora, Mamatha Samson, Karuna G, Ushasri A, A secure architecture of design for testability structures, *International Journal of Recent Technology and Engineering*, Open Access, Volume 8, Issue 2, July 2019, Pages 2816-2820. **(SCOPUS INDEXED)**
9. Swaraja K (2018), Medical image region based watermarking for secured telemedicine, *Multimed Tools Appl*, <https://doi.org/10.1007/s11042-0186020-7>. **(SCIENCE CITATION INDEX EXPANDED)**
10. K.Swaraja, "Protection of Medical Image Watermarking", *Journal of Advanced Research in Dynamical and Control Systems (JARDCS)*, Special Issue 11, July 2017, ISSN: 1943-023X. **(SCOPUS INDEXED)**
11. Swaraja K, Madhaveelatha Y, Reddy VS. Robust Video Watermarking by amalgamation of Image transforms and optimized Firefly Algorithm. *International Journal of Applied Engineering Research*. 2016; 11(1):216-25. **(SCOPUS INDEXED)**

12. K.Swaraja, Y.Madhavelatha, V.S.K.Reddy, "A secure method of optimized low complexity video watermarking", ARPN Journal of Engineering and Applied Sciences, VOL. 10, NO. 4, MARCH 2015, ISSN 1819-6608, pp.1822-1827. **(SCOPUS INDEXED)**

International conferences:

13. Kumari, C. U., Kora, P., Meenakshi, K., & Swaraja, K. (2019, March). Short Term and Long Term Path Loss Estimation in Urban, SubUrban and Rural Areas. In *2019 3rd International Conference on Computing Methodologies and Communication (ICCMC)* (pp. 114-117). IEEE. **(SCOPUS INDEXED)**
14. Kora, P., Kumari, C. U., Swaraja, K., & Meenakshi, K. (2019, February). Atrial Fibrillation detection using Discrete Wavelet Transform. In *2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT)* (pp. 1-3). IEEE. **(SCOPUS INDEXED)**
15. Meenakshi, K., Swaraja, K., & Kora, P. (2019). A Robust DCT-SVD Based Video Watermarking Using Zigzag Scanning. In *Soft Computing and Signal Processing* (pp. 477-485). Springer, Singapore. **(SCOPUS INDEXED)**
16. Kora, P., Meenakshi, K., & Swaraja, K. (2019). Detection of Cardiac Arrhythmia Using Convolutional Neural Network. In *Soft Computing and Signal Processing* (pp. 519-526). Springer, Singapore. **(SCOPUS INDEXED)**
17. Meenakshi, K., Swaraja, K., & Ch, U. K. (2019, March). Grading of quality in tomatoes using multi-class SVM. In *2019 3rd International Conference on Computing Methodologies and Communication (ICCMC)* (pp. 104-107). IEEE.(29 August 2019) [10.1109/ICCMC.2019.8819866](https://doi.org/10.1109/ICCMC.2019.8819866). **(SCOPUS INDEXED)**
18. K.Swaraja, Y.Madhavelatha, V.S.K.Reddy, "A Pristine Digital Video Watermarking in H.264 compressed domain", IEEE International conference on computational intelligence and computing research (ICCIC), Dec 18-20, 2014, pp.1-4, Coimbatore, India, ISBN: 978-1-4799-3974-9. **(SCOPUS INDEXED)**
19. Swaraja K, Latha YM, Reddy VS, Paramkusam AV. Video watermarking based on motion vectors of H. 264. In India Conference (INDICON), 2011 Annual IEEE 2011 Dec 16 (pp. 1-4). IEEE. **(SCOPUS INDEXED)**

PROFESSIONAL WORK:

Talks/Paper Presentations: Source & Channel Coding Techniques

Signal, Image, Video Analysis & Applications

Video Watermarking and Classification