




AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION

NAME & INITIALS	Dr.N.R.Shanker	
DESIGNATION	Professor	
EDUCATIONAL QUALIFICATION	M.E.,Ph.d.,	
EXPERIENCE	20 years	
DATE OF JOINING	7/11/2012	
EMAIL ID	nr_phd@yahoo.co.in	
AREA OF SPECIALISATION	Medical image processing, Biomedical signal processing, Near infra-Red (NIR)–Signal, processing Satellite image processing.	

EDUCATIONAL QUALIFICATION

DEGREE	BRANCH / SPECIALIZATION	INSTITUTION	UNIVERSITY	YEAR
Ph.D	Signal and Image Processing	COLLEGE OF ENGINEERING	ANNA UNIVERSITY	2013
M.Tech	Remote Sensing	COLLEGE OF ENGINEERING	ANNA UNIVERSITY	2002
B.E	ECE	SAPTHAGIRI COLLEGE OF ENGINEERING	MADRAS UNIVERSITY	1998

PROFESSIONAL MEMBERSHIPS

Member of International Association of Computer Science and Information Technology.

Member of Universal Association of Computer and Electronics Engineers.

Member of International society for Research and Development).

FDP ATTENDED

WORKSHOPS ATTENDED

FUNDED PROJECTS

Antenna trainer kit developed for the laboratory purpose (2006-2007),(Completed).

Software tool kit for sinusitis (2007-2008),(Completed).

Software toolkit for wheezing analysis (2008-2009), (Completed).

Biometric Gait Recognition Based security system implemented on FPGA-Project approved by **Tamil Nadu State Council For Science And Technology**, DOTE, campus, Chennai-25(2009-2010) (Completed).

Quality analysis of canteen food item using nano sensor-Project approved by **Tamil Nadu State Council For Science And Technology**, DOTE, campus, Chennai-25(2017-2018) (Completed)

PUBLICATION DETAILS

E. Ganesh, N. R. Shanker and M. Priya, "Non-Invasive Measurement of Glaucoma Disease at Earlier Stage Through GMR Sensor AH Biomagnetic Signal From Eye and RADWT Algorithm," in IEEE Sensors Journal.

doi: 10.1109/JSEN.2019.2909526.

P. Malathi, G. R. Suresh, M. Moorthi and N. R. Shanker, "Speech Enhancement via Smart Larynx of Variable Frequency for Laryngectomee Patient for Tamil Language Syllables Using RADWT Algorithm", *Circuits Syst Signal Process* (2019). <https://doi.org/10.1007/s00034-019-01055-8>.

N. Prabhakaran, S. S. Ramakrishnan, and **N. R. Shanker**, "Geospatial analysis of terrain through optimized feature extraction and regression model with preserved convex region," *Multimed. Tools Appl.*, pp. 1–19, 2018.

S. M. E. Senthilraj and N. R. Shanker, "A Novel Fault Identification System in Substations Using Real Time Thermal Image Processing," *Int. J. Latest Eng. Manag. Res.*, vol. 2, no. 7, pp. 41–45, 2017

N. R. Shanker, K. Prabhakaran, and P. Arul, "Non invasive technique for identification of wheezing using capacitance sensors," *Int. J. Eng. Technol.*, vol. 1, no. 2, pp. 169–171, 2009

M. P. Chitra, N. R. Shanker, B. Preethi, M. Sanu Murugan, and M. Soundarya, "Kernel level hardware based single chip computer and device control," *J. Theor. Appl. Inf. Technol.*, vol. 52, no. 3, pp. 316–324, 2013. [Click here](#)

S. Devi, L. Siva Kumar, N. R. Shanker, and K. Prabhakaran, "A Comparative Study between Vibration and Acoustic Signals in HTC Cooling Pump and Chilling Pump," *Int. J. Eng. Technol.*, vol. 2, no. 3, pp. 269–272, 2010.

D. Joseph, N. Kalaiarasi, K. Rajan, N. R. Shanker, and P. Katta, "Surveying the power quality in non-linear loads of tower block for performance assessment through optimization and transformation filters," *J. Comput. Theor. Nanosci.*, vol. 14, no. 4, pp. 1931–1947, 2017.

N. R. Shanker, A. Ezhil, and S. Archana, "Non-invasive method of detection of

<p>cholesterol using image processing," <i>Int. J. Med. Eng. Inform.</i>, vol. 4, no. 3, p. 223, 2012.</p>
<p>N. R. Shanker and S. S. Ramakrishnan, "Enhancement of multispectral ikonos satellite image using quantum information processing," <i>Fundam. Informaticae</i>, vol. 101, no. 4, pp. 305–320, 2010.</p>
<p>N. R. Shanker, K. Prabakaran, and S. Devi, "Detection of sinusitis by signal processing using independent component analysis," <i>Int. J. Med. Eng. Informatics</i>, vol. 1, no. 1, pp. 1–6, 2008.</p>
<p>S. Saravanan, R. Poovazhaki, and N. R. Shanker, "Cluster Topology in WSN with SCPS for QoS," <i>Wirel. Pers. Commun.</i>, vol. 99, no. 3, pp. 1295–1314, 2018.</p>
<p>Dr.S.S.Ramakrishnan, N.R.Shanker, "A study on quantum fourier transform and it's application in remote sensing for identification of features," <i>J. Theor. Appl. Inf. Technol.</i>, vol. 1, no. 1, 2009.</p>
<p>R. Senthil Kumar, K. R. Sugavanam, N. Prabhakaran, V. Senthil Kumar, and N. R. Shanker, "Online internal fault identification in transformers based on direction and location of magnetizing signature patterns," <i>J. Theor. Appl. Inf. Technol.</i>, vol. 58, no. 3, pp. 545–548, 2013.</p>
<p>S. Senthilraj, N. R. Shanker. "A condition monitoring system by using thermal image," <i>Int. J. Pure Appl. Math.</i>, vol. 120, no. 6, pp. 39–46, 2018</p>
<p>S. Dhanasekaran, N. R. Shanker, "Detection of anemia disease using pso algorithm and lbp texture analysis," <i>Int. J. Pure Appl. Math.</i>, vol. 120, no. 6, pp. 15–26, 2018</p>
<p>S. Arun, N. R. Shanker. "Data security in cloud storage using elliptical curve cryptography," <i>Int. J. Pure Appl. Math.</i>, vol. 120, no. 6, pp. 27–38, 2018.</p>
<p>M.Prabu, Dr.A.Celine Kavida,Dr.N.R.Shanker, "Prespective Forward Enhancement Of Boundaries In Satellite Image Via Transverse Dywt To Remove Geometric Distortion And measurement Errors" (Under Review)</p>

Madhusudhana Reddy Barusu, Umamaheswari Sethurajan, Meganathan Deivasigamani, Journal of Elektronika ir Elektrotechnika, "Diagnosis of Bearing Outer Race Faults Using a low-cost non-contact method with Advanced Wavelet Transforms"
Madhusudhana Reddy Barusu , Umamaheswari Sethurajan, Meganathan Deivasigamani, IET - The Journal of Engineering, "A non-invasive method for rotor bar fault diagnosis in three-phase squirrel cage induction motor with advanced signal processing technique".
V. R. Balaji, M. Murugan, S. Robinson, and R. Nakkeeran, "Design and optimization of photonic crystal based eight channel dense wavelength division multiplexing demultiplexer using conjugate radiant neural network," Opt. Quantum Electron., vol. 49, no. 5, 2017
D. Sivakumar, J. P. Srividhya, and T. Shanmathi, "A Review on Power Quality Monitoring and Its Controlling Techniques," 8th Int. Conf. Latest Trends Eng. Technol., vol. 1, no. 1, pp. 3–9, 2016
D. Joseph, N. Kalaiarasi, and K. Rajan, "In-Situ Domestic Load Harmonic Detection and Reduction Based on GLRM Algorithm for Optimum Filter Excerpt," Comput. Sci. Commun. Eng., vol. 7, no. 9, pp. 2095–2108, 2016
V. R. Balaji, M. Murugan, and S. Robinson, "Optimization of DWDM Demultiplexer using regression analysis," J. Nanomater., vol. 2016, 2016
V. R. Balaji, M. Murugan, and S. Robinson, "Optimization of Dense Wavelength Division Multiplexing demultiplexer with 25GHz uniform channel spacing," J. Nanomater., vol. 2016, pp. 1–17, 2016
V. R. Balaji and M. Murugan, "Two-dimensional photonic crystal assisted DWDM demultiplexer with uniform channel spacing," Dig. J. Nanomater. Biostructures, vol. 11, no. 4, pp. 1125–1134, 2016.
S.B.Mohan, T. A. Raghacendiran, R.Rajavel, "Patch based fast noise level estimation using DCT and standard deviation," Cluster Comput., vol. 4,
N. Duraichi and M. Suganthi, "Mimo-wsn implementation in geriatric care unit through masts and successive convex approximation algorithm," Biomed. Res., vol. 2018, no. Special Issue Artificial Intelligent Techniques for Medical Signal Processing Edition-II, pp. S243–S247, 2018

N. Gokul Raj and K. Umapathy, "5G Wireless Mesh Network 802.11s Load Balancing Architecture for 802.11 Bgn Radio-PCI Interface," Procedia Comput. Sci., vol. 87, no. 1, pp. 252–257, 2016

S. Durai and R. Parthasarathy, "Medical data transmission through PLCC with QFT-PUF encoder for data authentication.," Biomed. Res., vol. 2017, no. Special Issue Artificial Intelligent Techniques for Bio Medical Signal Processing Edition-I, pp. S51–S58, 2017.

Safia Ghias "Intelligent Diabetes Detection System Based On Tongue
tassets" Current Medical Imaging Reviews.

PATENT DETAILS

. Aqueous humor fluid static and dynamic property analysis via GMR sensor for human eye glaucoma analysis. (Awaiting Examination) Patent No.201741031639.

Bone stiffness assessment in joints via mems accelerometer during physiotherapy. (Awaiting Examination) Patent No.201841021453

Petrol Adulteration Testing System (PATS) Patent No. 20194103268

ACHIEVEMENT DETAILS

Letter of Appreciation form AMS Trust for College Fund Generation.

Certificate from SSIET (Sree Sastha Institute of Engineering and Technology) for
90% Result in DSPA Subject-M.E.-VLSI DESIGN.