Dr G N KESHAVA MURTHY

Affiliation: **Associate Professor,**
Dept. of Electronics & Instrumentation Engineering,
Siddaganga Institute of Technology, TUMAKURU-572103.
Contact: 9845657064
Email: gnk@sit.ac.in
Vidwan ID: 90969
Scopus ID: 55697869900
OrcID: 0000-00001-8584-3434
Faculty ID: SITF0225.

Education

	Degree	Year	Institute	Specialization
1	B.E.,	1996	Siddaganga Institute of Technology, Tumakuru	Instrumentation Technology
2	M.E.,	2001	University of Visveswaraya College of Engineering, Bengaluru	Power Electronics
3	Ph.D.	2016	Vellore Institute of Technology, Vellore.	Biosciences.

Professional Experience

	Date (from-to)	Designation	Organization
1	27-09-2024	Associate Professor	Siddaganga Institute of Technology
2	11-05-2011 to 26-09-2024	Assistant Professor	Siddaganga Institute of Technology
3	24-09-2006 to 11-05-2011	Senior Lecturer	Siddaganga Institute of Technology
4	21-05-2001 to 24-09-2006	Lecturer	Siddaganga Institute of Technology

Positions held

NCC Officer: 2008 to 2011 (3 Years)
Technisium Coordinator -2019
BOE and BOS member for UG Program.

Affiliations of Professional organizations

- MISTE
- MIE

Awards and Honors

- Research Award from VIT University, Vellore during 2013-14 for publishing papers in peer reviewed journals (Scopus and Thomson Reuters Indexed Journals)
- Research Award from VIT University, Vellore during 2014-15 for publishing papers in peer reviewed journals (Scopus and Thomson Reuters Indexed Journals)

  STUDENT BEST PAPER AWARD
- International Conference on Recent Developments in Mechanical Engineering (ICRDME-2022), Siddaganga Institute of Technology,Tumakuru.
- Automated water Monotoring and regulation System Using Internet of Things, International conference on Recent Advances in Science and Engineering Technology (ICRASET-2023), IEEE, BGS Institute of Teechnology, Mandya.
- Tomato Leaf Disease Detection Using Convolution Neural Network,International conference on Recent Advances in Science and Engineering Technology (ICRASET-2024), IEEE, BGS Institute of Teechnology, Mandya.

Courses Taught

Undergraduate Courses

- Business management & Communication
- Digital system design using VHDL
- Power Electronics
- Instrumentation-II
- Biomedical Instrumentation
- Analytical Instrumentation
- Transducers and Application
- Industrial Instrumentation
- Smart Sensors
- Industrial control system and automation
- Project Management
- Management & Entrepreneurship
- Emerging Applications of Biosensors
- Biology for Engineers

Postgraduate Courses

- Digital VLSI Design

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	ASHWINI K	Design and Development of an Efficient Algorithm for Biometric Authentication Using ECG and IRIS.	2024

Research Areas

- Biosciences
- Cognitive Neuroscience

Sponsored Projects

Ongoing Projects: Nil

Completed Projects: Nil

Publications

INTERNATIONAL JOURNALS: (SCOPUS INDEXED)

1. Different Techniques to Quantify the Driver Alertness, G N Keshava Murthy, Zaved Ahmed Khan, *World Applied Sciences Journal*,22(8): 1094-1098, 2013**,** ISSN 1818-4952, 2013.

2. Smart Alert System for Driver Drowsiness Using EEG and Eyelid Movements, G N Keshava Murthy, Zaved Ahmed Khan, *Middle-East Journal of Scientific Research* 14 (5): 610-619, 2013**,**ISSN:1990-9233, 2013.

3. Cognitive attention behaviour detection systems using Electroencephalograph (EEG) Signals.G N Keshava Murthy, Zaved Ahmed Khan, *Research J. Pharmacy and Technology.* 7(2): pp.238-247, 2014.

4. Correction of Ocular Artifacts in EEG signal using Empirical Mode Decomposition and Cross correlation,G N Keshava Murthy, Zaved Ahmed Khan, Research. Journal of Biotechnology, pp.24-29, Vol. 9(12), 2014.

5. Agricultural Pest and Disease Detection in Banana Plant,Keshava Murthy G N, Divya A, Jnana Shree K J, Ranjitha M R and Thanushree S, 70(8A), 1-479,2022, pp317-323, 2022, *Journal of Mines, Metals and Fuels.*

6. Amubalnce Path Clearance System with Health Monitoring using Internet of Things,Aishwaryasateesh, Ankitha K S, Navyashree K N, Rakshitha B C and G N Keshava Murthy,70(8A), 1-479, pp. 381- 386, 2022, *Journal of Mines,Metals and*

Fuels.

7. MRI Intracranial Neoplasm Localization Using Convolution Neural Network Based Residual Block ResUnet : A Systematic Approach, Dr. G N Keshava Murthy, Dr.Sujataha Joshi, Dr.Rekha H, Dr.Usha B. S, Nandini Prasad K.S Vol.11.Issue 4. Pp.1128-1135. 2023, *International Journal of Electrical and Electronics Research.*
8. Deep learning based biometric authentication using electrocardiogram and iris,Ashwini Kailas, GeevagondanahalliNarayanappaKeshavaMurthy,Vol. 13.No. 1, March 2024, pp. 1090-1103, *International Journal of Artificial Intelligence (IJ-AI).*

9. MEMS based wearable Smart-Glove and its application of gesture Detection and Sign Language Classification for vocally impaired with integrated Health Monitoring System,Dr.Rekha H, Banda Saisandeep, Rashma M, Dr. G N Keshava Murthy,Vol. 12(20), March 2024, pp. 495-502, *International Journal of Intelligent Systems and Applications in Engineering.*

10. A Novel Transfer Learning Approach to Improve Breast Cancer Diagnosing on Screening Mammography,Dr. G N Keshava Murthy, Dr.Chaitra H V, Dr.Vidya E V, Dr.Manjula B M, Dr.ChethanaSrinivas, Vol. 12(1), March 2024, pp. 300-306, *International Journal of Electrical and Electronics Research.*

11. A Novel Multimodal Biometric Person Authentication system Based on ECG and Iris Data, K. Ashwini, G N Keshava Murthy, S. Raviraja and G A Srinidhi, Vol. Jan 2024, Issue 1, pp.1-14, *Bio Med Research International.*

12. A Statistical Classificatory Approach for Predicting Neonatal Jaundice Using Cord Blood Albumin and Perinatal Predictors, G N Keshavamurthy, Vidyalakshmi K, SingampalliNohiniSandya, T C manjunath, SudhanshuMaurya, Kamal Sharma, KamalikaTiwari, 7(2), 2026, 904-915, *International Research Journal of Multidisciplinary Scope(IRJMS).*
13. Mechanical Process Control and Statistical Process control for Reducing Butter-Oil Defects in Industrial Production , Suresh Kumar Sahani, Ravi Kumar Raj, K Sathishkumar, G N Keshava Murthy, Manojkumar S B, Naveen K B, Binod Kumar sah, A Jayanthiladevi, PintuMandal, Kumareshwarsahani, Vol 7, No.1, 2026, 169-184. *Reports in Mechanical Engineering.*

International Journals: (Non-Scopus)

1. G N Keshava Murthy (2019).Smart Emergency Management with IoT for Integration of Emergency Centers and Patients**,** International Journal of Recent Technology and Engineering (IJRTE) pp.3979-3983ISSN: 2277-3878, Volume-8, Issue-4.

2. G N Keshava Murthy (2021). Ensemble Classifier for Drowsiness Detection from Electroencephalograph Signals. Complex Systems and Complexity Science Journal**.** ISSN1672-3813, pp.1-16, Volume- 8, Issue.4.

Conference Proceedings: International Conference: IEEE

1. G N Keshava Muthy, Vidyalakshmi K(2022). Ensemble classifier involving Deep Learning features for Drowsiness Detection from Electro Encephalograph signals, Grenze International Journal of Engineering and technology, EMIE 2022.

2. Ashwini K, G N Keshava Murthy (2023). Data Acquisition of Iris and ECG for person Biometric Authentication and Verification, ICSSES-2023.

3. Rajath A N, Vidyalakshmi K, G N Keshava Murthy (2023). A Comprehensive Analysis on Deep Learning based Image Retrieval. International conference on Applied intelligence and Sustainable Computing, ICAISC-2023.

4. G N Keshava Murthy, Piyush Kumar Pareek, manjunath T N, Shwetha N, Deepak R, Rashmi P.(2023) Development of Health care Model using AR-DVAE with Mayfly –MLP for Parkinson's Disease Detection. International Conference on Data Science and Network Security, ICDSNS-2023.

5. G N Keshava Murthy, Piyush Kumar Pareek, Jagadeesh B N, Nalini B M, Keerthi Kumar M, RashmiP.Detection of Skin Cancer using SFLA Based APEX Component Analysis Network, International Conference on Data Science and Network Security, ICDSNS-2023.

6. G N Keshava Murthy, Piyush Kumar Pareek, Rekha H, Sandya M, Deepak H A.Diabetic Retinopathy Fundus Image Classification Using MSCSO Based Optimization with Fuzzy Support Vector Machine.International Conference on Data Science and Network Security, ICDSNS-2023.

7. G N Keshava Murthy, Piyush Kumar Pareek, Nayana C P, Ramya I M, Keerthi Kumar M, RashmiP, Brest Cancer Identification and Classification using Contextual Deep Learning Technique in Histopathological Images, International Conference on Data Science and Network Security, ICDSNS-2023.

8. S Sangeetha, P. Shagunya, S. Shanthini, Dr. G N Keshava Murthy, Dr. R. Sathya. Crime Prediction and Prevention: Unleashing the Power of Deep Learning, 4th International Conference on smart Electronics and Communications, ICOSEC 2023.

9. G N KeshavaMurthy,Computational Methods for assessment of Lung Infection Based on Chest Scan Images of COVID-19 Patients, IEEE International Conference on Recent Advances in science & Engineering Technology (ICRASET) 2023.

10. Keshava Murthy G N, Thanuja V G, Neha Reddy S L, Abhiraj Kumar, Rohit Sharma, Abhinavanand, Automated Water Monitoring and regulation System using Internet of Things. IEEE International Conference on Recent Advances in science & Engineering Technology (ICRASET) 2023.

11. Keshava Murthy G N, Akhilesh S, Arpitha K N, Yashaswini R, Janhavi T S, Automated Smart Dustbin Using ESP32. IEEE International Conference on Recent Advances in science & Engineering Technology (ICRASET) 2023.

12. G N Keshava Murthy; Manjula G; Harshitha P; Achyutha Prasad, An Optimized Elliptical Curve Cryptography based Crypto-Watermarking Model in Smart Healthcare Application, Second International Conference on Data Science and Information System (ICDSIS) 2024.

13. G N Keshava Murthy; C P Nayana; P Harshitha; M Sandhya, Email Spam Detection using Graph based Convolutional Neural Network with MALO, Second International Conference on Data Science and Information System (ICDSIS) 2024.

14.G.N.KeshavaMurthy; NAchyuthaPrasad; PiyushKumarPareek; PankajZanke; MadhuPatil, Securing the Digital Data using SFLA based Deep Convolutional Neural Network in Medical Network Environment, Second International Conference on Data Science and Information System (ICDSIS) 2024.

15. G N Keshava Murthy; Nalini B M; Madhura G K; Nayana S, Vortex Search Optimizer based Hybrid Watermarking Scheme for Securing the Medical Images, 2023 IEEE 3rd Mysore Sub Section International Conference (MysuruCon).

16. Vandana N. PreethiD.Kusuma N. Keshava Murthy G.N. Enhanced Real-Time Mechanical Measurement Monitoring Through Cross- Platform BLE Interface in Windows and Android Applications. 2024, 3rdInternational Conference on Sentiment Analysis and Deep Learning, ICSADL.

17. G N Keshava Murthy, Abisha K, Bhoomika H B, Disha S R, Pallavi K R. Tomato Leaf Disease Detection Using Convolution Neural Network, 2024 International Conference on Recent Advances in Science & Engineering Technology (ICRASET),

18. G N Keshava Murthy, Pooja R, Supreetha G, Namratha G, Chithra M S. Early Detection of Stem Bleeding in Coconut Trees using Image Processing, 2024 International Conference on Recent Advances in Science & Engineering Technology (ICRASET).

19. Kavana L and G N Keshava Murthy, Power and Area-Efficient Multiplier Architectures: A Comparative Study of Array, Dadda, Booth, Wallace Tree, and Vedic Multipliers,2025. 3rd International Conference on Smart systems for applications in Electrical Sciences (ICSSES).

20. G N Keshava Murthy, Dhruthi P, Meghana D V, Saba, ShifaIman, Solar-Powered Blackspot 2026, Alert System, 4th International Conference on Knowledge Engineering and Communication Systems (ICKECS).

21. G. N. Keshava Murthy, Jashwanth Kumar V, Hemanth S, Sujay U Kattimani and Vikas N P Liquefied Petroleum Gas Leakage Detection and Monitoring System, 2026 International Conference on Emerging Research in Smart Electronics and Machine Informatics (ECMI).

22. G. N. Keshava Murthy, Naveen K B, Vijay Kumar Gowda B N, P. Bhanupriya and Navyashree H R. Vigilant Sentinel: A Multi-Modal Sensor Fusion System for Real-Time Sitting Posture Recognition and Alerting, 2026 International Conference on Emerging Research in Smart Electronics and Machine Informatics (ECMI).

Book Chapters

- Title of the Paper: "DUnet-MI: Noise Correction in Medical Images by Implementing Auto encoder Type Artificial Neural Network", Innovations in Clean Energy Technologies, ICET-2025, Scopus Indexed Publication, CRC Press, USA.

Editor/ Reviewer of Journal

- Reviewer – International Journal of Electrical and Electronics Research (IJEER), FOREX publication

Patents

- Automatic Biological Vermi Compost Maker-UK Patent (28th July 2023),
  Design number: 6292761
  Grant date: 11thJuly 2023. https://www.registered-design.service.gov.uk/find/

Invited Lectures, talks and workshops

Invited Lectures:

1. Delivered a guest lecture on **"Smart sensors and its application in Electrical and Electronics Engineering"** at Cauvery Institute of Technology on 09-03-2018.
2. Delivered a guest lecture on **"Transducer, Smart sensors and their Applications"**atBGSIT-BG Nagar on 24-04-2019.

3. Delivered a guest lecture on "**Smart sensors –Trends and its applications** BGSIT-BG Nagar on 28-04-2021.
4. **Resource Person for one week orientation program** for first year MBA students of BGS Institute of Technology Adichunchanagiri University18.12.2024.

(Dr. G N Keshava Murthy)