




# K. S. INSTITUTE OF TECHNOLOGY

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<b>Faculty Name</b>	Dr. Bharathi Gururaj	
<b>Designation</b>	Associate Professor	
<b>Educational Qualification</b>	Ph.D.	
<b>Experience in Years</b>	16	
<b>Areas of Interest</b>	Image Processing, Wireless Communication	
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## Educational Details

Examination/ Degree	College / University	Year of Passing	
Ph. D	RV College of Engineering Visveswaraya Technological University	2021	
M. Tech	M S Ramaiah Institute of Technology- VTU	2008	
B.E	PES Institute of Technology, Bangalore University	1999	

## Publications

Journal Publications:

- Paper entitled “Location of Faults in Six Phase Transmission Line using a Neuro Fuzzy System” published in Jordan Journal of Electrical Engineering, ISSN (print): 2409-9600, ISSN (online): 2409-961, Volume 10, | Pages 343-358 | Number 3 | September 2024
- Paper entitled “A novel smart irrigation framework with timing allocation using solenoid valves and Arduino microcontroller”, International Journal of Reconfigurable and Embedded Systems, July- 2024, 13(3), pp. 758–766
- Paper entitled “Hybrid Clustering Approach (SG-MFOA) using Multipath Cross-Layer Design in MANET Network”, IETE Journal of Research, June 2024, <https://doi.org/10.1080/03772063.2024.2352646>
- Paper entitled “An effective autism spectrum disorder screening method using machine learning classification techniques” Concurrency and Computation: Practice and Experience: Volume 36, Issue 2,25 January 2024.

- Paper entitled “Low Noise Operational Amplifier using Current Driving Bulk by CMOS Technology”, WSEAS TRANSACTIONS on ELECTRONICS DOI: 10.37394/232017.2023.14.17, Volume-12,2023.
- Paper entitled “Inter-Circuit Fault Classification in Parallel Incomplete Journey Transmission Lines Using Artificial Neural Networks: A MATLAB-Based Approach”, International Information and Engineering Technology Association (IIETA), Volume 56, Issue-3, pages – 377, June-2023.
- Paper entitled “Fuzzy Location Algorithm for Cross-Country and Evolving Faults in EHV Transmission Line”, , 23(2), pp. 130–139, June 2023.
- Paper entitled “Artificial intelligence–based neural network for the diagnosis of diabetes and COVID”, International journal of health sciences; Vol. Special Issue 1, July 2022.
- Paper entitled “Fuzzy rule-based fault location technique for thyristor-controlled series- compensated transmission lines”, International Journal of Fuzzy Logic and Intelligent Systems, Vol 21, Issue 4 pp.no.391-400, December 2021.
- Paper entitled “Support vector machine-based fault section identification and fault classification scheme in six phase transmission line” IAES International Journal of Artificial Intelligence Vol. 10, No.4, pp no.1019-1024 published in December 2021
- Paper entitled “FPGA Implementation of Low Power High Speed BTED Algorithm For 8-Bit Error Correction In Cryptography System”, International Journal of Emerging Trends in Engineering Research, September 2020 (Scopus indexed)
- Paper entitled “Design and development of low power BTED cryptography algorithm on FPGA”, International Journal of Advanced Trends in Computer Science and Engineering, 2020, 9(4), pp. 4359–4362, 27. (Scopus indexed).
- Paper entitled “Study and analysis of BTED error correction codes for cryptography applications” International Journal of Advanced Trends in Computer Science and Engineering, 2020, 9(5), pp.8938–8942(Scopus indexed)
- Paper entitled “Channel Encoding System for Transmitting Image over Wireless Network”, IJECE (Scopus indexed journal SNIP: 1.001; SJR: 0.296), October 2020.
- Paper entitled “Insights on Error-resilient Image transmission schemes on wireless Networks”, International Journal of Advanced computer science and Applications, Volume 8, Issue 1 January 2017. (Web of science indexed).
- Paper entitled “Image coding, Packetization and Channel coding for communication over wireless networks – A Review”, International Journal of Advanced Research in Science and Engineering, Volume 4, Issue 1, March 2015.

#### Conference Papers:

- Paper Presented on “Automatic Classification and Artifacts Removal of EEG Signal Using Supervised and Unsupervised Model” International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), 2023/10/18, 1526-1531, IEEE.
- Paper presented on “Tumor Segmentation Techniques from Medical Images” 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2023 - Proceedings, 2023, pp. 591–596.

- Paper presented on “An Integrated IoT Technology for Automated Industrial Boiler Monitoring System” ,2nd IEEE International Interdisciplinary Humanitarian Conference for Sustainability, on 3rd and 4th November 2023 Bangalore.
- Paper presented on “Women Safety design using Panic button”, International Conference on Emerging Trends in Engineering Management and Technology, RRCE, Bangalore, June 21st and 22nd 2022.
- Published in Journal of algebraic Sciences and Statistics (WoS).

Patents Filed: 03, Published:02

MOBILE DEVICE CHARGING SYSTEM WITH ADAPTIVE SOLAR PANEL USING ARTIFICIAL INTELLIGENCE.

Application number: 202441049571, Date of Filing: 28/06/2024, IPO

Status: Waiting for Examination.

IoT and ML based Bone Density Measurement and its Relation to Various Bone Disorders using Sensor Networks, New Application Filed, Application Number 202441017815, Application Ref Number-202441017815, Filing Date-12/03/2024 -Indian Patent Office, Waiting for Examination. IPO

Smart water level and quality monitoring system in overhead tanks with auto turnoff, Application number-202341041822 June 2023.

Status: Filed.IPO

## Awards

**Exemplary Services Award**  
**Best Supporting HoD**

## Professional Membership

**IEEE - 91233005**

## Contact Details

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