

Dr. K. Bharath Kumar - Research Contributions

PATENTS

- 2024 - IoT Based Crop Monitoring Method Using Smart Device with Machine Learning Technique
- 2024 - Enhancing Power by Reducing Harmonics in Grid Connected Inverters Using Deep Learning Technique
- 2023 - Crime Data Analysis Using Various Machine Learning Models
- 2023 - Renewable Method of Charging Laptops by Piezoelectricity
- 2023 - YOLO R-CNN Method with Real-Time Kaggle Dataset for Weapon Detection
- 2021 - Artificial Intelligent System for Predicting Hard Disk Failure
- 2021 - Autonomous Robot for Pick-up Shopping Cart Items
- 2020 - Design and Development of IoT Based Flying and Jumping Locomotive Robot for Killing Locust

PEER-REVIEWED JOURNAL PUBLICATIONS

- 2021 - Analysis of Tree-Shaped Slotted Impedance Matching Antenna for 60 GHz Femtocell Applications (ICT Express, Elsevier, SCI)
- 2020 - Reflexive Engine to Lock the System for Driving While Intoxicated – Simulation by Using LabVIEW (iJOE)
- 2020 - Implementation of a 32-bit MIPS Based on the RISC Processor by Using VHDL
- 2019 - Millimeter Wave Frequency Power Divider for Short Range Applications at 60 GHz
- 2018 - Four Dielectric Substrate Analysis for Millimeter Wave Applications (Materials Today, Elsevier, SCI)
- 2018 - Investigation of SIW Directional Coupler for 60 GHz mm-Wave Applications
- 2018 - Design of Hut Shaped SIW Antenna on Analog Integrated Circuits for 60 GHz Applications
- 2017 - A Hybrid Coupler with CPW-SIW Transition for RADAR and 5G Applications
- 2017 - Wideband Substrate Integrated Waveguide Filter for 60 GHz Applications

CONFERENCE PUBLICATIONS (YEAR-WISE)

- 2026 - Machine Learning-based Outlier Detection in IoT Wireless Systems
- 2026 - Intelligent IoT-based LPG Gas Leakage Detection and Automated Fire Mitigation System
- 2025 - Forecasting Air Quality with Machine Learning Methods
- 2025 - Object Detection Using YOLO with Audio Feedback Using Raspberry Pi
- 2025 - Real-Time Guidance for Smooth Indoor Navigation Environments
- 2023 - Implementation of Smart Bore-Well Child Rescue System
- 2023 - Raspberry Pi-Based IoT Garbage Monitoring System
- 2023 - Semi Circular Shaped Slotted Antenna for Wide Band Wireless Application
- 2023 - An Efficient Miniature LoRa Antenna for IoT Applications
- 2023 - Super-Resolution Image Reconstruction Through Coupled Dictionary Learning

- 2021 - Double E-Shaped Slotted Reconfigurable Square Patch Antenna for X-Band Wireless Applications
- 2021 - Analysis of Resonance Matching Zig Zag Fat Arrow Shaped Slot Antenna
- 2018 - Wideband Tree Shaped SIW Antenna for 60 GHz Applications
- 2018 - A 3-Port Y-Junction SIW Power Splitter for 60 GHz Applications
- 2018 - Analysis of Impedance Matching Stair-Shaped Slot Antenna for 60 GHz Femtocell Applications
- 2017 - 3-Port T-Junction SIW Power Divider for 60 GHz Applications
- 2017 - Multiband E-Shape SIW Antenna for mm-Wave Applications
- 2017 - One Port to 4 Port Power Divider Using SIW Technology
- 2016 - Design of SIW Filters for RADAR and 5G Applications
- 2016 - Design of SIW Patch Fed U Slot Antenna for mm-Wave Applications
- 2016 - Survey of Recent Technologies and Research Challenges of SIW

PEER-REVIEWED BOOK CHAPTERS

- 2027 - Leveraging IoT for Smart Library Management: Design, Applications, and Literature Perspectives
- 2018 - V-Band SIW Wideband Band-Pass Filters for mm-Wave Applications (Springer)
- 2016 - Data Mining of Acoustical Properties of Speech as Indicators of Depression