# Dr. SHIVAKUMARASWAMY G M

B.E (Electrical & Electronics), M.Tech (Electronics), Ph.D (Electronics & Communication Engineering )

#### **Associate Professor**

Department of Electrical & Electronics Engineering

Bapuji Institute Engineering and Technology, Davanagere-577004

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## AREA OF INTEREST

• Data Security, Data Privacy, Power System, Low Power System Design

# EDUCATIONAL QUALIFICATION

- Ph.D. Completed from Srinivas University, Mangaluru, in the year 2023
- **M.Tech** (Electronics) with first class from **SIR MVIT**, Bengaluru, Affiliated to Visvesvaraya Technological University.
- **B.E** (Electrical & Electronics) with first class from **Bapuji Institute of Engineering and Technology**, Davangere, Affiliated to Kuvempu University, in the year 2000

## **TEACHING EXPERIENCE - 20 Years**

- Presently working as Associate Professor in Electrical and Electronics Engineering Department B.I.E.T, Davangere from 01.01.2025 to till date.
- Working as Assistant Professor in Electrical and Electronics Engineering Department B.I.E.T, Davangere from 01.01.2019 to 31.12.2024.
- Worked as Assistant **Professor** in **Electronics and Communication Engineering** Department B.I.E.T, Davangere from **01.01.2012 to 31.12.2018**.
- Worked as a Lecturer in Electronics and Communication Engineering Department B.I.E.T, Davangere from 02.09.2004 to 31.12.2011.

# PROFESSIONAL MEMBERSHIP

- Life Member of Indian Society for Technical Education LM-53857
- Life Member of Institute of Electronics & Telecommunication Engineers : M-219040

## PAPER PRESENTATION

## **International Conference:**

1. Praveen K, **Dr. Shivakumaraswamy G.M**, Dr. Rajanna G S, Presented and published a paper entitled "A Novel Techniques to Reduce the Test Data Volume and Test Time for General Configuration by Embedded Deterministic Testing", International Conference on Internet of Things, Communication, Intelligence and Computing - during 5th & 6th May 2023, held at Shridevi Institute of Engineering & Technology.

# PAPER PUBLICATION

 Dr. Shivakumaraswamy G M., "An Investigation of Privacy and Security Concerns in the Internet of Things: A Comprehensive Survey", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 13, Issue 4, April 2024 with ISSN (O) 2278-1021, ISSN (P) 2319-5940, DOI: 10.17148/IJARCCE.2024.134166



- 2. **Dr. Shivakumaraswamy G M**., "Agricultural utility vehicle with field monitoring using IoT", Volume 13, Issue 04, April 2024 of IJERT with ISSN : 2278-0181
- 3. **Dr. Shivakumaraswamy G M.,** Dr. Rajanna G S, Dr. Ashoka K, "IoT-based malware detection using OBL-based DBN with hybrid GHABC optimization in healthcare applications" International Journal of Advanced Technology and Engineering Exploration (IJATEE), paper communicated (SCOPUS indexed journal with ISSN: 2394 7454).
- 4. **Shivakumaraswamy G M.,** Dr. Rajanna G S, Dr. Ashoka K, "Design an IoT Enabled Healthcare System for Improving the Performance of Security and Authentication in Cloud Computing", TELEMATIQUE, Volume 21, Issue 1, October-2022 pp. 6114-6126. (Web of Science and ESCI indexed journal with ISSN 1856-4194)
- Shivakumaraswamy G M., Dr. Rajanna G S, Dr. Ashoka K, "Privacy preserving in Electronic Healthcare Data using Application Based Requirements with Sensitivity Level Flags" Computer Integrated Manufacturing Systems, Volime-28, No.-11. (SCOPUS indexed Q2 journal with ISSN: 1006 – 5911).
- 6. **Shivakumaraswamy G M.,** Dr. Rajanna G S, Dr. Ashoka K, "Issues of Security and Privacy in Internet of Things: A realistic Survey" NEUROQUANTOLOGY, Vol. 20, Issue. 11, pp. 8106-8112, November-2022. (SCOPUS indexed Q3 journal with ISSN: 1303-5150).
- 7. Praveen K, **Shivakumaraswamy G M,** Dr. Rajanna G S, Dr. Ashoka K, "Analysis of Test Data and Test Data Volume by using EDT test compression for Multiple Configurations" in International Journal of Advanced Research in Computer and Communication Engineering, Impact Factor 7.39, Vol. 11, Issue 1, January 2022
- 8. Praveen K, **Shivakumaraswamy G M**, Vidya G H "Study of Frequency and Polarization reconfigurable on square patch antenna" in International Journal of Scientific research in Computer Science, Engineering and information Technology, Volume VII, Issue II, | ISSN 2456-3307, March 2021.
- 9. Shivakumaraswamy G M, Vidya G H "Conversion of sound energy to Electrical energy" in International Journal of research in Engineering, Science and Management, Volume III, Issue VI, | ISSN 2561- 5792, June 2020
- 10. **Shivakumaraswamy G M "**Brain Tumor detection using image processing and sending tumour information over GSM" International Journal of advanced research in Computer and Communication Engineering ,Volume V, Issue V, | ISSN 2278-1021, May 2016

### **EXTRA/CO-CURRICULAR ACTIVITIES**

- Coordinator EC-Forum for a period of three years and conducted successfully many curricular and extracurricular activities.
- Worked as a Team Member of VTU Central Valuation from 2006 to 2009 at BIET Center.
- Accompanied EC students to visit Industries BSNL Telephone Exchange. FM Station Chitradurga, Bhadravathi. Vestas Wind Mill Power Station near Chitradurga.

Varahi Hydro Power Plant .... etc

- Worked as a team member of Public Address System Committee
- Worked as Invigilator for KPSC Exam, Police Exam, ComedK, GATE .... etc
- Worked as Recourse Person for IGNOU, BPT, STJIT... etc
- Worked as a team member of Value Added Training Programme 2012
- Worked as Internal Deputy Chief Superintendent for June-July-2018 and Dec-2018-Jan-2019 VTU examinations at B.I.E.T., Davangere.
- Worked as Invigilator, Deputy Chief Superintendent (Internal & External) for B.E, M.Tech & M.B.A examinations.

## FDP/STTP/WORKSHOPS/WEBINAR/CONFERENCES ATTENDED

- Participated one Week FDP on "Empowering Education Through E-Learning and Digital Tools" Jointly Organized jointly by Department of MBA, Vaagdevi Engineering College, Telangana, India & RSP Research Hub, Coimbatore, Tamil Nadu, India during October 21st 26th, 2024.
- Participated one week Short Term Training Programme (STTP) on "Transformative Education: Integrating AI Tools jointly organized by department of civil engineering, Radhakrishna Institute of Technology and Engineering, Odisha, India & RSP Science Hub, Coimbatore, Tamil Nadu, India during August 05th – 11th Aug 2024
- Participated in National Level One Week Faculty Development Program on "Recent Development in Green Technologies" organized by Department of Electrical and Electronics Engineering, ATME College of Engineering, Mysuru, held from 24th 29th September 2021.
- Participated in the five days Faculty Development Programme on Achieving Excellence in Teaching, Research and Commercialization during 16th August 21st August, 2021 organized by Amity Institute of Information Technology, Amity University Kolkata.
- Participated in the One Week Faculty Development Programme Advance Cyber Security and Forensics from 26th July 2021 to 31th July 2021 (1 week) organized by E & ICT Academy, IIT Kanpur (A Joint Initiative of MeitY & IIT Kanpur)
- Participated in the five days Faculty Development Programme on Machine Learning Foundation. Methodologies and Interconnections during 19th July 23rd July, 2021organised by Amity Institute of Information Technology, Amity University Kolkata.
- Attended the Webinar on "Effective Utilization of VTU Consortium E-Resources using RRCE" jointly organized by Library and Information Centre & Department of Information Science & Engineering of Raja Rajeswari College of Engineering, Bangalore on 2nd July 2021.
- participated in AICTE-ISTE Sponsored Orientation/ Refresher One Week Online Programme On "Model Based Design Using MATLAB, Electronic Design Automation Technologies" From 9th to 15th March 2021 Organized by K. I. T.' s College Of Engineering (Autonomous), Kolhapur.
- Attended a Five Day's Online Faculty Development Programme on "Advancement in Signal and Image Processing" organized by Department of Electronics and Communication Engineering in association with IEEE and IETE Student Chapter of Atria Institute of Technology, Bengaluru during 8 – 12th February 2021.

- Participated in online Webinar on "Recent Trends in Electrical Power Systems" organized by ANGADI Institute of Technology, Belegavi held on 06th January 2021
- Participated in online Webinar on "Advances in Solar Energy Technology" organized by Oxford college of Engineering, Bengaluru, 01st January 2021
- Participated in online Webinar on "Recent Trends in Electrical Power Systems" organised by ANGADI Institute of Technology, Belegavi held on 06<sup>th</sup> January 2021
- Participated in online Webinar on "Advances in Solar Energy Technology" organized by Oxford college of Engineering, Bengaluru, 01<sup>st</sup> January 2021
- Participated in online Webinar on "Remote Lab Platform for Hardware Circuit Experiments" organized by BIET, Davangere held on 10<sup>th</sup> November 2020
- Participated in online Webinar on "OS and Automotive Systems" organized by Vemana Institute of Technology, Bangalore held on 18<sup>th</sup> July 2020
- Participated in online Five days Faculty Development Program on "Sensors and Their Applications" organised by IEEE Council, Vemana Institute of Technology, Bangalore held on 13-17<sup>th</sup> July 2020
- Participated in National Level online Webinar on "Simulation Driven Innovation for e-Mobility" organized by KLE Institute of Technology held on 10<sup>th</sup> June 2020.
- Participated in one day Workshop on "Basic First aid training" organized by Vmedo's Basic first aid curriculum at BIET college, Davangere, held on 9<sup>th</sup> Nov 2019
- Participated in one day Workshop on "First Course in the IOT Series for Teachers" organized bylearning center IIT Bombay, held on September 21, 2019 at BIET college, Davangere
- Participated in a one week Training program on "Application of LABVIEW in Engineering & Research" in February 2019 conducted by department of Electronics and communication Engineering, BIET college, Davangere
- Participated in one day Faculty development program on "Computer vision in industry, cloud, and micro services" in February 2019 conducted in BIET college, Davangere
- Participated in one week Short term Training program through ICT mode on "EFFECTIVE TEACHING" in JULY 2019 conducted in BIET college, Davangere
- Participated in Two day FDP on LabView & its Applications on 2nd & 3rd Aug 2012 at BIET, Davangere
- Participated in VTU VGST Faculty Development Programme on "Recent Advances In MedicalImaging Techniques" on 26th 30th Mar 2012 at GSSSIETW, Mysore
- Participated in Two day Hands-on on FDP on Low Power Embedded Systems Using Texas

InstrumentsMSP430 Microcontroller on9th-10th Feb2012 at BIET, Davangere

- Participated in Two day workshop on "LABVIEW & NI Hardware" on2nd 3rd Sep-2011 at KSIT, Bangalore
- Participated in Two day workshop on "Advanced Electrical Power Systems and Artificial IntelligenceTechniques" on11th -12th Feb 2011 at BIET, Davangere
- Participated in Two day workshop on "Artificial Neural Network & its Applications." on 17th-18thSep-2010 at STJIT, Ranebennur
- Participated One day workshop on "Mathematics & its Applications In Engineering" On 18th Feb -2010 at BIET, Davangere
- Participated in Three day workshop on "Digital System Design using HDL Synthesis & Simulationusing Test Benches" on16th- 18th Apr 2009 at BIET Davangere
- Participated in One day workshop on "Mechatronic and Microprocessor" on 7th March 2009 at BIET, Davangere
- Attended a seminar on" Mathematics & Applications in Engineering", on 18th Feb 2010 at BIET, Davangere
- Workshop on Embedded System Design, organized by IIPC, E&C Dept, BIET, Davangere and Advanced Electronic Systems, Bangalore 27th April 2007.
- Workshop on "Tanner Tools. Pro- A complete VLSI design", organized by E&C Dept., BIET,Davangere and Sovereign Technologies, Bangalore on 16th Nov.2006.
- Attended a workshop on "Disaster prediction, Prevention & Mgmt" ISTE 35th Annual Convention from15th -17th Dec 2004 at BIET, Davangere.

### RESPONSIBILITIES

- NBA Criterion 6 Coordinator.
- NAAC Criterion 4 Coordinator.
- Sports Convener from 2015 2021.
- Coordinator for EC Forum, Time Table for EC & EEE Department, Internship, Alumni, Parents, Entrepreneurship Development Cell...
- Analog Electronics Lab In-charge.

### **PROJECT GUIDED**

• Guided more than 20 UG Project batches.

#### SUBJECTS TAUGHT

- Basic Electrical Engineering
- Basic Electronics
- Linear Integrated Circuits & Applications
- Computer Concepts and C Programming
- Fundamental of VLSI Design
- Analog Electronic Circuits
- Digital System Design
- Signals & Systems
- Network Analysis
- Operating System
- Operation Research and Management...

### **RESULT ANALYSIS FOR LAST TWO YEARS**

Sl. No.	Year	Subject Code	Subject	Total No. of Students	Pass	Appeared	Absent	%
01	2025 Even	BEE 405B	Op-amps and LIC	67	Current Academic year Awaiting Result			
	2024- 25 Odd	BEE 304	Analog Electronic Circuits	67				
02	2024 Even	BEE 515D	Fundamental of VLSI Design	62	Awaiting Result			
03	2023 - 24 Odd	BEE 405B	Op-amps and LIC	62	58	62	00	94%
04	2023 Even	BEE 303	Analog Electronic Circuits	62	51	62	11	82%
05	2022- 23 Odd	21EE42	Digital System Design	65	54	59	06	92%
06	2022 Odd	21EE32	Analog Electronic Circuits and opamps	65	46	65	00	71%

### **RESEARCH AND TEACHING GOALS**

#### **RESEARCH GOALS**

- 1. Research Guide ship
- 2. To develop research laboratories at global level.
- 3. To publish the papers in Indexed Journal, IEEE transaction, etc
- 4. To build strong network with Research fraternity
- 5. Attending/Organizing Technical talk/Seminar/Workshop on Recent Advancement in Technology
- 6. To apply for research funding / grants from AICTE, VGST, DST etc...

### **TEACHING GOALS**

- 1. Tracking and motivating students to get university ranks
- 2. To keep the students deeply involved in the learning process and reward to motivate the students.
- 3. Motivate the students to do better and serve the society for development of the country.
- 4. Preparing the lessons creatively and deliver effectively with teaching aids so that intentional learning has to happen among students.
- 5. To motivate more number of students to take SWAYAM / NPTEL courses.
- 6. Organizing or Delivering the talks to various colleges and to other departments

### **RESPONSIBILITY OF IMPROVEMENTS IN THE DEPARTMENT & INSTITUTE**

### DEPARTMENT

- 1. Start up new PG Course
- 2. To implement effectively Outcome Based Education in the department.
- 3. Organizing FDPs, STTP, Workshops, Conferences, Project competitions etc.
- 4. Conduct More Free Webinars & Industry Expert Sessions
- 5. To adopt pedagogical methods in teaching and learning process in the department.
- 6. Counseling the students for their life goals
- 7. To organize more extracurricular activities in the department, which will be benefit overall development of the students and in turn department also.

### INSTITUTE

- 1. Committed to excellence and ready to accept all the responsibility which will be assigned by the principal at institute level.
- 2. Work to attain Deemed to be University / Private University / Autonomous status to the Institute.

## PLANS FOR STUDENTS TO FACE ACADEMIC CHALLENGES & PLACEMENTS

- 1. Conducting Soft skill Activities such as group discussion, mock tests and mock interviews in the classes / Forum.
- 2. Aptitude / Technical training programs/Coding competitions
- 3. Helping the students to build a strong resume
- 4. Organizing GATE Preparation classes for students
- 5. Regularly in touch with Alumni, Entrepreneurs for placement

## START-UP & ENTREPRENEURSHIP IDEA AMONG STUDENTS

- 1. Arranging Inspirational Talks / Interaction with alumni Entrepreneurs, students will understand the challenges involved and motivate them to set up an initial business plan
- 2. Teacher can collaborate with expert entrepreneurs and enhance practical knowledge by facilitating the visit to different industries
- 3. Prompt Students to Take Bold Actions and achieve the goals.
- 4. Teachers respond to their students' ideas, views and suggestions during lessons, which can be expected to have an influence on the students' subsequent effort and inclination in coming up with new ideas, views and suggestions.
- 5. Regularly in touch with Alumni Entrepreneurs to get some inputs.

- 6. Motivating the students to submit proposals for NAIN funding.
- 7. Track the progress and monitor till the project completion.

#### PREPARATION TO IMPLEMENT NEP AT INSTITUTE LEVEL

- 1. Hands-on training will be given to students under skill development programme at the department level.
- 2. Technical ability of the students will be enhanced by adopting the suitable interdisciplinary courses.
- 3. As NEP suggests online courses for self-learning and lifelong learning students will be motivated and guided to take up more courses.
- 4. As promoting higher studies is one of the major goals of NEP, Students will be motivated to take up competitive exams like GATE, CAT etc...and Dept. already started tutoring GATE aspirants.
- 5. No hard separations between arts and sciences, between curricular and extra-curricular activities

#### Dr. SHIVAKUMARASWAMY G M

Associate Professor, Department of EEE, BIET, Davangere -04