# Dr. Leela GH

Associate Professor Department of E & C E, BIET, Davangere [leela\_mahesh@rediffmail.com]



#### Work Experience: 27 Years

- Worked as a lecturer in E&CE Department of Bapuji Institute of engineering and Technology Davangere from 1994 to July 2007.
- Worked as Assistant Professor from August 2007 to October 2019 in the department of E & C E.
- Working as Associate Professor since November 2019 in the department of E & C E.

# Educational Qualification:

- Ph.D. from Shivaji University, Kolhapur, 2019.
- M.Tech [Digital Electronics] from BVB College of Engineering & Technology, Hubli, Karnataka University, 1998, first class with distinction.
- B.E [Electronics & Communication] from Bapuji Institute of Engineering and Technology, Kuvempu University, 1994 with first class.

#### Awards:

Awarded as a best teacher for 7 times from the college for achieving 100% result in the subjects handled.

## Membership:

- Life Member of Indian Society for Technical Education : LM27483
- Life Member of Institute of Electronics & Telecommunication Engineers : M-219022

### Core Subjects Taught:

Cryptography, Network & Cyber Security, ARM Microcontroller and Embedded Systems, Verilog HDL, Microcontrollers, Programming in C++, Computer Communication Network, Digital Signal Processing, Control Systems, Microprocessors, Embedded Systems, Real Time Systems, Digital System Design using VHDL, Electronic Instrumentation.

## **Expert Lectures Delivered:**

- Delivered a lecture session on "Introduction to Arduino" under one week workshop on "Arduino & LabVIEW" during 25<sup>th</sup> to 29<sup>th</sup> July 2016 organized by E&C department, BIET, Davangere.
- Delivered a lecture on "Semiconductor Devices" under a workshop for 2<sup>nd</sup> year PUC Physics teachers of Davangere district on 25<sup>th</sup> August 2015 at Siddaganaga PU College, Davangere.
- Delivered a lecture on "Introduction to Test Benches" under Three day workshop on "Digital System Design using HDL-Synthesis & Simulation using Test Benches" during 16<sup>th</sup> to 18<sup>th</sup> April 2009, organized by E&C Department, BIET, Davangere.
- Delivered a Lecture on "Hardware Description Language" on 18<sup>th</sup> July 2008 organized by Department of Electronics and Communication, Bapuji polytechnic, Davangere.
- Delivered a lecture on "Microprocessors" under one week STTP on Mechatronics from 3<sup>rd</sup> to 7<sup>th</sup> July 2006, sponsored by ISTE and organized by Department of Mechanical Engineering, Bapuji Polytechnic.
- Delivered a lecture on "Modernization of Embedded Systems", under EC FORUM, Bapuji Polytechnic, Davangere on 18<sup>th</sup> Sept 2005.
- Worked as counselor for IGNOU.
- Worked as visiting Lecture for BCA programme under Bapuji Hi-tech Education.

## Seminars/Workshops/Events Organized:

- Worked as coordinator while organizing National Level online one week Faculty Development Program on Introduction to Microchip FPGA from 19<sup>th</sup> to 23<sup>rd</sup> July 2021, in association with Tecnomic Components Pvt. Ltd. Bengaluru, ISTE Faculty Chapter BIET and IETE Shivamogga Center.
- Worked as coordinator for "Workshop on Internet of Things(IoT)" organized by E&CE Department, BIET from 9<sup>th</sup> to 11<sup>th</sup> Oct 2018 for V sem 'A' students and from 29<sup>th</sup> to 31<sup>st</sup> Oct 2019 for V sem 'B' students.
- Worked as coordinator for two-day Faculty Development Workshop on "ARM Cortex M3 Microcontroller" organized by BIET Davangere in association with ALS Bangalore, held at BIET Davangere, on 23<sup>rd</sup> and 24<sup>th</sup> Jan 2018.
- Worked as coordinator for a Value Added Training Program on "Object Oriented Programming using C++" organized by E&CE department, BIET, from 7<sup>th</sup> Sept to 18<sup>th</sup> Nov 2017.
- Worked as coordinator for two-day Faculty Development Workshop on "Low Power Embedded Systems using MSP430 Microcontroller" organized by BIET Davangere in association with Texas Instruments India University Program and Cranes Software International Ltd, held at BIET Davangere, during feb 2012.
- Worked as coordinator for one day workshop on "Tanner Tools Pro ( A Complete VLSI Design System)" organized by E&C Department in association with ISTE Chapter BIET and Sovereign Technologies, Bangalore on 16<sup>th</sup> Nov 2006.
- Worked as coordinator for "Certification course on Embedded Systems & Design" conducted by E&C Department, BIET Davangere in association with CITL Bangalore during 8<sup>th</sup> April to 23<sup>rd</sup> May 2004.
- Worked as coordinator for "Certification course on VLSI & VHDL" conducted by E&C Department, BIET Davangere during 10<sup>th</sup> feb to 10<sup>th</sup> Mar 2001.

# Seminar/Workshops Attended:

- Completed NPTEL-AICTE FDP (funded by MHRD) on Effective Engineering Teaching in Practice.
- Completed NPTEL Online Certification Course (funded by MHRD) on Effective Engineering Teaching in Practice, Jan- Jun 2022.
- Participated in IP Awareness/Training Program organized under National IP Awareness Mission on 28<sup>th</sup> Jan 2022 organized by Intellectual Property, India
- Participated and successfully completed one week AICTE-VTU joint training program for teachers on "An Overview of Teaching Techniques in basic Electronics and Communication Engineering" from 13<sup>th</sup> to 17<sup>th</sup> Dec 2021 Organized by VTU Human Resource Development Centre (VTU - HRDC), Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur (Dist.) - 562101.
- Attended two days workshop on " Implementation of National Education Policy 2020 organized by BIET, Davanger in association with VTU, Belgavi on 10<sup>th</sup> and 11<sup>th</sup> Dec 2021.
- Participated in Mentor Graphics Webinar on Full Custom and Semi-Custom Design Flow organized by *CoreEl Technologies*, on 15<sup>th</sup> July 2021.
- AICTE ISTE approved Orientation/Refresher Programme on Accreditation: An Accelerator for Quality Improvement in Engineering Education Organized by SDMCET, Dharwad from 22<sup>nd</sup> to 28<sup>th</sup> Apr 2021.
- Participated in a three days FDP on Artificial Intelligence using MATLAB Organized by CoreEL *Technologies* from 23rd to 25<sup>th</sup> Feb 2021.
- Participated in a Webinar on FDP on Deep Learning using MATLAB held on 25<sup>th</sup> Feb 2021 organized by CoreEL Technologies.
- Attended a seminar on Role of Placement Coordniators for Enhancing Campus Placements- by Dr. D Ranganath, Dean placement RV college Bangalore, organized by BIET, Davangere on 9<sup>th</sup> Jan 2021.
- Completed AICTE Sponsored one week Faculty Development Program (Phase III) on Research Areas in Biomedical Signal Processing organized by Sri Vasavi Engineering College from 14<sup>th</sup> to 19<sup>th</sup> Dec 2020.
- Completed one week NPTEL-AICTE FDP (funded by MHRD) on Hardware Modeling using Verilog.
- Completed NPTEL Online Certification Course (funded by MHRD) on Digital Circuits July- Dec 2019.
- Completed NPTEL Online Certification Course (funded by MHRD) on Hardware Modelling using Verilog during Aug- Dec 2019.
- Participated in one day workshop on "esim-a first course in IoT Series for Teachers" held at BIET, Davangere on 21<sup>st</sup> Sept. 2019. This training was organized by the Teaching Learning Centre ICT at IIT Bombay, funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMITT), MHRD, GOvt. of India.
- Attended Two-day Workshop on "ARM Cortex M3 Microcontroller"

organized by Department of Electronics & Communication Engineering in association with ALS, Bengaluru, on 23<sup>rd</sup> & 24<sup>th</sup> Jan 2018.

- Attended Two-day Workshop on "System Design using Vivado Design Suite and Zynq-7000 Soc" organized by Department of Electronics & Communication Engineering, ISTE-BIET Faculty Chapter, Davanger and CoreEL Technologies, Bengaluru, on 15<sup>th</sup> & 16<sup>th</sup> June 2017.
- Participated in a Workshop on "Intellectual Property Rights" organized by Research & Development Cell of Bapuji Institute of Engineering & Technology, Davangere held on 6<sup>th</sup> April 2017.
- Attended one day Seminar on "Role of Women in Societal Reforms" organized by Department of Information Science & Engineering in association with ISTE, Faculty Chapter, ISTE Students' chapter, NSS, YRCW, BIET, Davangere on 10<sup>th</sup> March 2017.
- Participated in Two Days Workshop on "Women Empowerment" held on 18<sup>th</sup> & 19<sup>th</sup> Dec 2014, organized by IS& E department, BIET in association with WPL Program of ISTE, New Delhi.
- Participated in Four Days Workshop on "Training of Evaluators on Outcome Based Education and Accreditation" jointly organized by NBA, New Delhi and BIET, Davangere on 5<sup>th</sup> March 2014(Phase 1) and 21<sup>st</sup> to 23<sup>rd</sup> March 2014(Phase II).
- Attended a workshop on "Research ADD-ONs" conducted by Department of Computer Science and Engineering in association with ISTE Students' Chapter BIET on 19<sup>th</sup> March 2014.
- Attended "ISTE Sponsored Ramanujan Mathematics Awareness Programme (RMAP 2013)" organized by Department of Mathematics in association with ISTE Chapter, BIET at BIET Davangere on 1<sup>st</sup> Mar 2013.
- Attended Two-day Faculty Development Program on "LabVIEW and its Applications" organized by E&CE department, BIET Davangere in association with ISTE BIET Chapter & Trident Techlabs Pvt. Ltd, Bangalore at BIET Davangere, on Aug 2<sup>nd</sup> & 3<sup>rd</sup> 2012.
- Attended Two-day Faculty Development Workshop on "Low Power Embedded Systems using MSP430 Microcontroller" organized by Texas Instruments India University Program and Cranes Software International Ltd in collaboration with Board of Studies, VTU Belgaum, held at Texas Instruments India, Bangalore, during 18<sup>th</sup> and 18<sup>th</sup> Jan 2012
- Participated in "Mission10X" workshop conducted at BIET Davangere in association with Wipro Technologies, Bangalore and ISTE from 2<sup>nd</sup> Feb to 6<sup>th</sup> Feb 2010 and participated in Advanced Workshop on 19<sup>th</sup> & 20<sup>th</sup> April 2010.
- Participated in one day workshop on "Embedded System Design", organized by E&C Department, BIET in association Industry Institute Partnership Cell, BIET and Advanced Electronic Systems, Bangalore on 27<sup>th</sup> April 2007.

- Attended a two days seminar on "Microwind Tool", organized by SIMS, Bangalore, from 28<sup>th</sup> to 29<sup>th</sup> Aug 2006.
- Attended one day workshop on "Advanced CMOS Submicron Technology & DSP Applications" organized by SDM college of Engineering & Technology, Dharwad in association with SIMS, Bangalore and ni2 designs on 12<sup>th</sup> Sept 2005.
- Participated in 35<sup>th</sup> ISTE Annual Convention & National Seminar on the theme "Disaster Prediction, Prevention & Management" Organized by BIET, Davangere during 15-17 December 2005.
- Participated in the 3 days workshop on 8086/VHDL/8051 Design Labs" organized by SJCE, Mysore during 19<sup>th</sup> to 12<sup>th</sup> Sept 2004.
- Attended AICTE-ISTE sponsored STTP on "Processors for DSP Architecture and Trends" organized by NMAN Institute of Technology, NITTE, during 27<sup>th</sup> to 31<sup>st</sup> Jan 2004.
- Attended AICTE-ISTE sponsored STTP on "Embedded Systems & Applications" organized by Kongu Engineering College, Perundurai, Erode, TamilNadu, during 3th to 14<sup>th</sup> Nov 2003.
- Attended "Certification course on Embedded Systems & Design" conducted by E&C Department, BIET Davangere in association with CITL Bangalore during 3th May to 8<sup>th</sup> June 2003.
- Attended AICTE-ISTE sponsored STTP on "Recent Advances in Biomedical Engineering" organized by BIET, Davangere during 29<sup>th</sup> July to 9<sup>th</sup> Aug 2002.
- Attended "Certification course on VLSI & VHDL" conducted by E&CE department, BIET Davangere during 10<sup>th</sup> feb to 10<sup>th</sup> March 2001.
- Attended AICTE-ISTE Sponsored STTP on "Advanced Communication" organized by REC, Bhalki, during 15<sup>th</sup> to 26<sup>th</sup> March 2000.
- Attended ISTE Sponsored STTP on "Microcontrollers in Power and Industrial Control" organized by E&C department KBP College of Engineering & Polytechnic, Satara, Maharastra, during 10<sup>th</sup> to 22<sup>nd</sup> Jan 2000.
- Attended a National Seminar on "Fuzzy Techniques and their Applications" sponsored by AICTE< NewDelhi & CEP, BIET Davangere, organized at BIET Davangere, on 14<sup>th</sup> & 15<sup>th</sup> Dec 1996.

# **Publications:**

- Presented a paper on "FPGA Implementation for SPAM Filtering" in ETECS-2015 National Conference on Emerging Trends in Electronics and Computer Science, sponsored by UGA-SAP, DST-PURSE, IEEE India, SSCS & CASS Chapter, jointly organized by Department of Electronics & Department of Computer Science, Shivaji University, Kolhapur.
- Presented a paper on "Low Power VLSI Architecture for Image Compression" in ETECS-2015 National Conference on Emerging Trends in Electronics and Computer Science, sponsored by UGA-SAP, DST-PURSE, IEEE India, SSCS & CASS Chapter, jointly organized by Department of Electronics & Department of Computer Science, Shivaji University, Kolhapur.
- Presented a paper on "FPGA based Cryptoprocessor using Hardware Software Co design" in LATEST 2014-National Conference on Latest Advances, Trends in Electronic Science & Technology, UGC-SAP Sponsored & Technically Sponsored by IEEE Bombay Section, at Shivaji University, Kolhapur, Feb 14<sup>th</sup> & 15<sup>th</sup> 2014.
- Presented a paper on "Reconfigurable Image Processor" in LATEST 2014-National Conference on Latest Advances, Trends in Electronic Science & Technology, UGC-SAP Sponsored & Technically Sponsored by IEEE Bombay Section, at Shivaji University, Kolhapur, Feb 14<sup>th</sup> & 15<sup>th</sup> 2014.
- Presented a paper "Nurturing the Cyber-Physical Pedagogical Approach for Outcome-based Learning in Embedded Systems" in of IETEC'13-International Engineering and Technology Education Conference", 2013.
- Published a paper on "Techniques Adopted for Containment of Polymorphic Worms-A Review" in "IJECCT-International Journal of Electronics and Communication and Computer Technology" 2012.
- Published a paper "Blow-CAST Fish: A New 64-bit Block Cipher", in "IJCSNS-International Journal of Computer Science and Network Security", April 2008.

- Published a paper "Performance Enhancement of Blowfish and CAST 128 Algorithms for Security Analysis of Improved Blowfish Algorithm using Avalanche Effect", in "IJCSNS-International Journal of Computer Science and Network Security", March 2008.
- Published a paper "Performance Enhancement of Blowfish Algorithm by Modifying its Function" in "Innovative Algorithms and Techniques in Automation, Industrial Electronics & Telecommunications", Springer 2007.
- Presented a paper "Performance Enhancement of CAST 128 Algorithm by Modifying its Function", CISSE 2006-international Conference on Computer, Information, Systems Sciences & Engineering.
- Prepared & submitted a course material on "PIC Microcontrollers", for the year 2001-2002, under CEP programme.

### **Other Responsibilities:**

- Working as Dean Admission since 2020.
- Working as Digital Media coordinator.
- Worked as QPDS team member for Dec/Jan 2019 VTU examination work
- Working as Departmental Students' Project Coordinator.
- Chaired a session on "Application of Communications" in International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT-2015) held at BIET, Davangere, and Karnataka during 29<sup>th</sup> to 31<sup>st</sup> Oct 2015.
- Worked as Supervisor at Auditorium Construction- Audio & Vision installation work from April 2015.
- Worked as Deputy Chief Superintendent (Internal) during June/July 2014 examination.
- Worked as BOE for Kuvempu University for the academic year 200809, 2009-10, 2010-11.
- Worked as Departmental Coordinator for BEA website from July 2008 to July 2016.
- Worked as ISTE staff coordinator for the year 2005-06.