

Dr. Banumathi.K.L
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Department of E & C E
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Work Experience: 27 years

- Worked as a lecturer in E&CE Department of Bapuji Polytechnic Shabnur from 16/09/1993 to 26-07-2005
- Worked as a lecturer in E&CE Department of Bapuji Institute of engineering and Technology Davangere from Aug 2007 to Aug 2012
- Working as Asst. Professor in E&CE Department of Bapuji Institute of engineering and Technology, Davangere since Sept 2012.

Educational Qualification:

- Ph.D [Image Processing Techniques for Skew Detection and Correction of Handwritten Historical Documents] from VTU-RRC ,Belagavi,2022
- M.Tech [VLSI Design & Embedded System] from JC College of Engineering & Technology, Mysore, VTU, 2007.
- B.E [Electronics & Communication] from Bapuji Institute of Engineering & Technology, Mysore University, 1993

Membership:

- Life Member of Indian Society for Technical Education : MISTELM27490
- Life Member of Institute of Electronics & Telecommunication Engineers : IETE-M219025
- Life Member of Institute of Engineers: MIE-M/124737/3

Core Subjects Taught:

Introduction to Electronics and Communication, VLSI Design, Basic Electronics and Communication Engineering, Basic Electronics, Analog Electronic Circuits, Electronic Instrumentation , Logic Design, Field Theory , Control System, Linear IC's and Applications, Microcontrollers, Power Electronics, Microprocessors, Embedded Systems, Digital System Design using VHDL, Fundamentals of CMOS VLSI, Microelectronics Circuits, Engineering Electromagnetics, Arm Microcontroller and Embedded Systems, Digital Electronics, Digital Image Processing, Digital System Design.

Seminar/ Workshops Attended:

FDP:

- Attended six days FDP on **Master Math by Python** organized by Department of CSE,JIT,Davangere from 6th to 11th February 2023.
- Participated in five days FDP on **Analog and Digital IC Design: Semiconductor Industry approach** jointly organized by Atria Institute of Technology and Entuple Technologies from 26th to 30th September 2022.
- Attended six days FDP on Embarking on **Open Source Software in an Engineering & Research Journey** in association with FOSS group, VTU, Belagavi,from 19th to 24th April 2022.
- Participated in International Webinar on **High Performance Bio Technology for Health Care** organized by Parishkar College of Global Exxcellence ,Jaipur,Rajasthan on 17th Febrauary 2022.

Online FDP:

- Banumathi K L of BIET,Davangere has participated in One Week AICTE – VTU Joint Training Programme for Teachers on **An Overview of Teaching Techniques in Basics of Electronics and Communication Engineering** organized by VTU Human Resource Development Centre (VTU - HRDC),Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur (Dist.) - 562101 from 13th to 17th December 2021.
- Banumathi K L of BIET,Davangere has participated in Workshop in offline mode on **Implementation of National Education Policy 2022** organized by BIET in association with VTU,Belagavi at BIET,Davangere, from 10th to 11thDecember 2021
- Banumathi K L of BIET,Davangere has participated in 5-Day Faculty Development Programme on **“Digital VLSI Design and Verification”** organized by Department of ECE, Bangalore Institute of Technology in association with Entuple Technologies and IEEE-BIT CAS from 23rd to 27th August 2021.
- Banumathi K L, Assistant Professor of Bapuji Institute of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary Faculty Development Programme on **“VLSI -IP DESIGN Approach to SRAM compiler design”**from 16th to 20th August 2021 at GM Institute of Technology.
- Mrs.Banumathi K L Participated in National Level One Week Online Faculty Development Program on **“Introduction to Microchip FPGA “** from 19th to 23rd July 2021, organized by Department of Electronics & Communication Engineering, Bapuji Institute of Engineering and Technology, Davangere in association with Tecnomc Components Pvt. Ltd.Bengaluru, ISTE Faculty Chapter BIET and IETE Shivamogga Center.
- Mrs.Banumathi K L Participated in FDP on **Embarking on Open Source Software in an Engineering & Research Journey** in association with FOSS group, VTU, Belagavi,from 19th to 24th April 2022
- Mrs. Banumathi K L actively participating and passing the test in the AICTE sponsored two week online Faculty Development Program on **RELIABILITY ENGINEERING AND SYSTEM SAFETY** during the period 15th to 27th February 2021
- Mrs. Banumathi K L has Participated in five day Faculty Development Program on **Advancement in Communication Engineering Technologies with Simulation tools** from 1st to 5th July 2020.

Online Webinar:

- Participated in the Online Webinar on **Design of Linear and Nonlinear Microwave Circuits** organized by Department of Electronics and Communication Engineering, Brindavan College of Engineering, Bengaluru held on 07- 07-2020.
- Attended Two Days National Webinar on **Research Trends in Image Processing and Pattern Recognition** organized by Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bengaluru held on 29-06-2020to 30-06 2020.
- Participated in the Webinar on **Future Technology Trends** organized by Department of Electronics and Communication Engineering in association with IEEE APS Society, St. Joseph's Institute of Technology, Chennai on 28-06-2020.
- Participated in the Webinar on **Co-Existence between Radar and Communication Systems** organized by Department of Electronics and Communication Engineering in association with IEEE APS Society, St. Joseph's Institute of Technology, Chennai on 27-6- 2020.
- Participated in the Webinar on **Multi-Robot Motion Planning: The Easy, The Hard and The Uncharted** organized by Department of Electronics and Communication Engineering in association with IEEE APS Society, St. Joseph's Institute of Technology, Chennai on 26-06-2020.
- Participated in the Webinar on **An Overview of the IEC Protection against Electric Shock** organized by Department of Electronics and Communication Engineering in association with IEEE APS Society, St. Joseph's Institute of Technology, Chennai on 25-06-2020.
- Participated in the Online Webinar on **Creative Design on Adobe Photoshop and Illustrator** Organized by Department of Electrical & Electronics Engineering, V.V. Sangha's, RaoBahadur Y. Mahabaleswarappa Engineering College, Ballari,Internal Quality Assurance Cell (IQAC), on 24-06-2020
- Mrs. Banumathi K L has attended one week online awareness programme on **Use of Mobile Applications for digital payment and E-Governance services** in association with The Institute of Electronics and Telecommunication Engineers (IETE), held on 21st to 26th December 2020, Organized by Department of Computer Science and Engineering
- Mrs. Banumathi K L has participated in webinar on **Assistive Technology for Empowerment of Persons with Disability** conducted on 11th December 2020 in association with Composite Regional Centre (CRC) For Skill Development, Rehabilitation & Empowerment of Persons with Disabilities (Under Administrative Control of National Institute for the Empowerment of Persons with Intellectual Disabilities, Secunderabad), Department of Empowerment of Persons with Disabilities (Divyangjan) & Ministry of Social Justice & Empowerment, Government of India.
- Attended a Management development program on **Organizational And Leadership Challenges** During Covid 19 Organized by BanarsidasChandiwala Institute of Professional studies, Dwarka,New Delhi on 20-06-2020
- Participated in the Online Webinar on **New Exploring and Understanding the Normal during COVID-19** Pandemic organized by RKDF University, Bhopal (M.P.)-India on 19-06-2020.
- Participated in the Online Webinar on **Intellectual Property Rights Patent Filing Procedure** organized by the Department of Computer Science and Engineering on 9th June, 2020.

Online Quiz:

- Participated in online General Awareness Quiz on **Pandemic COVID-19** Organized by Department of Computer Application, ShivharshKisan PG College,Basti, U.P., India on 18-07-2020.

- Participated in a National Level Technical E-Quiz on **COMMUNICATIONS** Organized by Department of Electronics and Communication Engineering (ECE) on 17-07-2020.
- Participated in online Quiz on **Fundamentals of Operating Systems** Conducted by Department of Computer Science and Engineering, Jain Institute of Technology, Davangre, on 15-07-2020.
- Participated in National Level online Quiz on **Digital Electronics** Organized by Department of Electrical & Electronics Engineering, Mandsaur University, Mandsaur on 05-07-2020.
- Participated in National Level Online Quiz on **Digital Communication** Organized by Department of Electronics and Communication Engineering, SJMIT, NH-4 Bypass, Chitradurga, Karnataka from 02-07-2020 to 04-07-2020.
- Participated in National Level Technical Quiz on **Digital Logic Circuits** Organized by Department of ECE on 28-6-2020.
- Participated in Technical online Quiz on **VLSI** Organized by Department of Electronics and Communication Engineering, Jain Institute of Technology, Davangere on 25-6-2020.
- Participated in online Quiz on **Electronics Circuits and Digital Electronics** Conducted by Department of Electronics and Communication Engineering, JIT, Davangre, on 22-06-2020.
- Attended One day workshop on **eSim, a first course in the IoT series for Teachers** held at BIET in IS & E Dept. on 21st Sep 2019 organised by the Teaching Learning Centre (ICT) at IIT Bombay, funded by the Pandit Madan Malaviya National Mission on Teachers and Training (PMMNMTT), MHRD, Govt. of India.
- Attended two day faculty development program on **Lab VIEW and its Application** on 2nd and 3rd Aug 2012 organized by department of E&CE in association with ISTE, BIET chapter and Trident Tech Labs Pvt. Ltd. Bangalore.
- Attended a two day Faculty development program on **Low Power Embedded System using MSP430 Microcontroller** organized by Dept. of E&CE in association with Texas Instruments and Cranes Software International Ltd., Bangalore on 9th and 10th Feb 2012
- Attended two day workshop on **MSP 430 Microcontroller** on 12th & 13th December 2011
- Attended one day workshop on **Embedded Systems Design-Principles & Practice**, Faculty Development Workshop, Organized by Board for IT Education Standards (BITES) & BVBCET, Hubli on 15th Nov 2010.
- Attended three day workshop on **Digital System Design using HDL – Synthesis & Simulation using Test Benches** from 16th to 18th April 2009, at BIET, Davangere.
- Attended workshop on **Electronics in Industrial Automation** from 16th to 21st July 2007 at SJCE, Mysore.
- Attended workshop on **Research Methodologies and Latex** from 20th to 22nd December 2016 at Rajarajeshwari College of Engineering, Bengaluru.
- Attended two day workshop for Faculty on **ARM Cortex M3 Microcontroller** on 23rd & 24th Jan 2018 organized by Department of Electronics & Communication Engineering, in association with Indian Society for Technical Education (ISTE), BIET Chapter & Advanced Electronic Systems (ALS), Bangalore.

Publications:

- **"Document Image Skew Detection and Correction based on 3 Quadrants Gradient Detection Scheme"** Published in **IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 10, Issue 5, Ser. I (Sep. - Oct. 2020), PP 20-24 e-ISSN: 2319 – 4200, p-ISSN No. : 2319 – 4197**

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- **“A New Method to Estimate Skew Angle in Printed and Historical Document Images”** Published in **International Journal of Recent Technology and Engineering (IJRTE)** ISSN: 2277-3878, Volume-8 Issue-4, November 2019
- Presented a paper on **“An Approach to Estimate Skew Angle in Printed Document Images”**, First International Conference on Advances in Information Technology (ICAIT-2019) organized by Computer Science and Engineering, Adichunchanagiri Institute of Technology, Chikkamagaluru during 25th to 27th July 2019.
- Presented a paper on **“A New algorithm for Skew Detection and Correction of Historical Kannada Documents in International Conference on Multimediamedia Processing, Communication & Information Technology MPCET 2018 held at J.N.N. college of Engineering, Shivmoga, during 8th & 9th June 2018.**
- Presented a paper on **“Line and word Segmentation of Kannada Handwritten Text documents using Projection Profile Technique”** in the International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECOT-2016) in association with IEEE Bangalore Section, organized by GSSS Institute of Engineering & Technology for Women, Mysuru on 9th & 10th December 2016.
- Presented a paper on **“Database Development of Historical Documents: Skew Detection And Correction”**, International Journal of Advanced Technology in Engineering and Science, IJATES\Certificate, July 2014.
- Presented a paper on **“Mat lab Implementation of Text Extraction Using Multiscale Edge Based Algorithm”** at the international Conference on VLSI and Signal Processing held KSIT, Bangalore on 4th and 5th of May 2012.