

***Mrs. Shubha V. Patel***

Assistant Professor  
Department of Electronics and Instrumentation Engineering  
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***Work Experience : 16 Years***

- Transferred to Department of Electronics and Instrumentation Engineering, Bapuji Institute of Engineering and Technology, Davangere, on 24<sup>th</sup> November 2017.
- Promoted as Assistant Professor in the Department of Biomedical Engineering, Bapuji Institute of Engineering and Technology, Davangere in October 2012.
- Worked as lecturer in the Department of Biomedical Engineering, Bapuji Institute of Engineering and Technology, Davangere from February 2006 to September 2012.
- Worked as lecturer in the Department of E&CE, SJMIT, Chitradurga from November 2004 to January 2006.

***Educational Qualification:***

- M.Tech [Biomedical Instrumentation] from SJCE, Mysore, Mysore University, 1998 with First Class.
- B.E [E & C] from Bapuji Institute of Engineering and Technology, Mysore University, 1993 with Second Class.
- ( Pursuing Ph.D under VTU )

***Title of the Research work:***

“Analysis of Muscular Paralysis using Bio Signals”

***Dissertation Details M.Tech:***

“ECG Transmission over Telephone”

***Roles and Responsibilities:***

- Department NBA Criteria 3 Coordinator
- Department Library Incharge
- Department Time Table Coordinator.
- Department AICTE Activity Point Program Coordinator.
- Nominated for Institute level Women Welfare Activity cell.
- Team member for MoU of Institute with PROLIFIC SYSTEMS AND TECHNOLOGIES PVT.LTD, Bangalore on 12<sup>th</sup> September 2019. PROLIFIC SYSTEMS AND TECHNOLOGIES PVT.LTD- Company dealing with automation solutions and advanced automation training on Programmable Logic Controllers(PLCs), Supervisory Control and Data Acquisition(SCADA), Distributed Control Systems(DCS), Drivers and Instrumentation basics.

- Team Member for MoU of Institute with Applied Cognition Systems Pvt. Ltd., Bangalore, the company dealing with Biomedical Instrumentation and Healthcare product development. R&D lab was established in the Department of Biomedical Engineering, 2014.

***Awards:***

1. 'Best Project Award' in Inhouse students project Exhibition cum Presentation hosted by Research & Development Cell, Bapuji Institute of Engineering and Technology, Davangere, for guiding the student Project on 25<sup>th</sup> May 2019.
2. Secured the II Prize in the Quiz competition organized on the eve of World Women's Day-2019 on 19<sup>th</sup> Mar 2019 held at BIET Davangere.
3. Secured I Prize in "Kannada Padabandha" competition organized by N.S.S and Computer science Engineering Department on the eve of Kannada Rajyotsava on 22nd Nov 2016.  
Secured the I Prize in the Quiz competition organized on the eve of World Women's Day-2015 on 16th Mar 2015 held at BIET Davangere in association with ISTE, Delhi, NSS, Youth Red Cross Wing
4. KSCST 'Project of the Year' Award during the Seminar and Exhibition held at Angadi Institute of Technology, Belgaum in the Student Project Programme during the year 2012-2013 (36th Series).
5. KSCST 'Project of the Year' Award during the Seminar and Exhibition held at SDM Institute of Technology, Ujire, in the Student Project Programme during the year 2011-2012 (35th Series).
6. Certified for successfully completing the "Mission 10x Learning Approach Practitioners Certificate", from WIPRO & ISTE on April 2010.
7. 'Best Project Award' during the Inhouse students project Exhibition held at Bapuji Institute of Engineering and Technology, Davangere, for guiding the student Project in the year 2009-2010.
8. Awarded as "Best Teacher" with silver medal from Bapuji Institute of Engineering and Technology, Davangere for having obtained cent percent results in the subjects taught for the academic year 2007-2008.

***Membership:***

Life Member of Indian Society for Technical Education.

Number: LM70920

***Core Subjects Taught:***

Digital Communication, Analog communication, Clinical Science-IV (Radiology & Radiotherapy), Managing Engineering and Technology, Communication Systems, Biosensors and Bioinstrumentation, Biomedical Equipments, DSP and Applications, Database Management Systems in Health Care, 8086 Microprocessor and Peripherals, VLSI Design, Biostatistics, Biomaterials and Artificial Organs, Virtual Instrumentation, Computer Communication Networks, OOPs with C++, Digital Design and HDL, Biosensors and Bioinstrumentation, Industrial Process Instrumentation.

### ***Seminars/Workshops/Events Organized:***

1. Organized a State Level “STROKE REHABILITATION AWARENESS & SCREENING CAMP” in association with Stroke Rehabilitation Foundation, Bangalore and Youth Red Cross Wing, BIET from April 28<sup>th</sup> – 29<sup>th</sup>, 2007
2. Organized Extension Lecture Programs on “Lasers & Applications” on 22<sup>nd</sup> September 2007, and “X-rays in Biomedical Field” on 29<sup>th</sup> September 2007.
3. Organized National Level Student Symposium on “Emerging areas in Biomedical Engineering 2<sup>nd</sup> BME EXPLORE-2009” on 18<sup>th</sup> April, 2009.
4. Organized an invited talk on “Healthcare Technology Reaching the un-reached” on 6<sup>th</sup> October, 2009.
5. Organized 3<sup>rd</sup> National Level Student Symposium on “Emerging areas in Biomedical Engineering BME EXPLORE-2010” on 20<sup>th</sup> March, 2010.
6. Organized a workshop on demonstration of “Latest Biomedical Instruments” on 2<sup>nd</sup> September 2010.
7. Organized a talk on “Health Screening: Importance of Blood and Urine Investigation” on 28<sup>th</sup> September, 2010.
8. Organized 4<sup>th</sup> National Level Technical Student Symposium on “Emerging areas in Biomedical Engineering “BME EXPLORE-2011” on 9<sup>th</sup> April 2011.
9. Organized an invited talk on “Recent trends in Radiology & Radiodiagnostics” on 24<sup>th</sup> February 2012.
10. Organized two days workshop for students on the topic “Medical Image Processing Tools” from 24<sup>th</sup> – 25<sup>th</sup> February 2012.
11. Organized 5<sup>th</sup> National Level Student Symposium on “Emerging Areas in Biomedical Engineering BME-EXPLORE-2012” on 26<sup>th</sup> March 2012.
12. Organized “Voluntary Blood Donation & Blood Group Testing Camp” on 22<sup>nd</sup> March 2013.
13. Organized 6<sup>th</sup> National Level Students’ Technical Symposium “BME Explore-2013” on 9<sup>th</sup> April 2013
14. Organized Shuttle Badminton Tournament “BM CUP-2013” from 27<sup>th</sup> – 29<sup>th</sup> April 2013
15. Organized the Two days Workshop on “Signals and Systems” from 20<sup>th</sup> – 21<sup>st</sup> September, 2013
16. Organized an invited talk on “Information Communication Technology for Elderly Care” on 6<sup>th</sup> December, 2013.
17. Organized one day workshop on “New Challenges and Opportunities in Health Care”, in association with Applied Cognition Systems, Bangalore on 15<sup>th</sup> February 2014.
18. Organized Two-Day Workshop on “Smart Sensors”, in association with Department of E&IE, BIET, Davangere and Applied Cognition Systems Private Limited, Bengaluru on 17<sup>th</sup> and 18<sup>th</sup> February 2016.
19. Organized a talk on “Scope and Opportunities of Biomedical Engineering” by Mr. Praveen Gowda, CEO and Co-founder, Arera Technology, Bengaluru, on 29<sup>th</sup> August 2016.
20. Organized an “Interdepartmental Shuttle Badminton Tournament – BM CUP 2017”, during 10<sup>th</sup> April to 13<sup>th</sup> April 2017.
21. Organized an invited talk by T.G.K. Murthy, ISRO scientist (Retired) and Paramapujya Mataji Yoganandamayi, Sadhana Ashrama, Davangere on the topics “Science of Human Excellence” and “Channelizing Youth Power” on 21<sup>st</sup> Apr 2017.
22. Organized an invited talk by Nandish S., Assistant Professor, School of Information Sciences, Manipal on the topic “ Opportunities and Challenges in Biomedical Imaging” on 27<sup>th</sup> May 2017.
23. Organized Essay writing competition for Girl Students of BIET on 7<sup>th</sup> March 2018 on the occasion of International women’s day on the topic “Contributions of women in Mass Media - Newspaper, Radio, TV and Film Industry”.
24. Organized BM Cup -2018 on 11<sup>th</sup> -13<sup>th</sup> April 2018. Students and faculty from various department participated in the event.

25. Organized an invited talk by Dr. Mallikarjun S Holi, Chairman and HoD, Dept. of EIE, UBDTCE, Davangere, on the topic “Scope of Biomedical Instrumentation”, on 12th September 2018.
26. Organized an invited talk by Mr. Kiran Lalgiri, Application Engineer, Yokogawa, Abu-Dabhi, on the topic “Opportunities for Instrumentation Engineers”, on 7<sup>th</sup> November 2018.
27. Organized an invited talk by Mrs. Bhagya R Navada, Asst. Prof. (Sr.), Dept of ICE, MIT, Manipal, on the topic “Scope for Instrumentation Engineers”, on 23<sup>rd</sup> May 2019.
28. Organized an invited talk by Mr. H.S. Shivashankar, Branch Manager, Prolific Systems and Technologies Pvt Ltd, Bengaluru, on the topic “Introduction to Programmable Logic Controller and SCADA”, on 23<sup>rd</sup> September 2019.
29. Organized Three Days Workshop on “ PLC and SCADA”, Conducted by Mr. H.S. Shivashankar, Branch Manager, Prolific Systems and Technologies Pvt Ltd, Bengaluru from 23<sup>rd</sup> October 2019 to 25<sup>th</sup> October 2019.

***Seminar/ Workshops Attended :***

1. Attended workshop on “Tanner Tools Programme (A complete VLSI design)” on 16<sup>th</sup> November 2006 organized by Dept. of E & C – BIET, Davangere, ISTE Chapter – BIET and Sovereign Technologies, Bengaluru.
2. Attended workshop on “Application Workshops for High-Performance Electronic Design” organized by ANSOFT & VISTECH GROUP on 11<sup>th</sup> September 2007 at Bangalore.
3. Attended seminar on “Recent Trends in Nanotechnology” organized by ISTE Students’ Chapter and Industry Institute Partnership Cell, BIET, Davangere on 20<sup>th</sup> September 2008.
4. Attended workshop on “Mechatronics and Microprocessors” organized by ISTE Local Chapter, Industry Institute Partnership Cell & Prod-Mech Forum, BIET, Davangere on 7<sup>th</sup> March 2009.
5. Attended three days workshop on “Digital System Design using HDL – Synthesis & Simulation using test Benches” organized by Department of E & C in association with ISTE Chapter, BIET, Davangere from 16<sup>th</sup> - 18<sup>th</sup> April, 2009.
6. Attended National Conference on Nanobiotechnology: Applications in Medicine “NANOBIOTECH 2009”, organized by S.S. Institute of Medical Sciences & Research Centre, Dept of Biotechnology, B.I.E.T., Davangere & Research Centre for Nanosciences and Technology, Davangere University at S.S. Institute of Medical Sciences & Research Centre Davangere from 28<sup>th</sup> - 30<sup>th</sup> November 2009.
7. Attended two days workshop on “High Impact Teaching Skills”, organized by WIPRO, Dale Carnegie & Associates, at B.I.E.T, Davangere from 2<sup>nd</sup> – 3<sup>rd</sup> February 2010.
8. Attended five day workshop “MISSION 10X” , organized by WIPRO & ISTE, at B.I.E.T, Davangere from 2<sup>nd</sup> February to 6<sup>th</sup> February 2010.
9. Attended two days advanced workshop organized by WIPRO & ISTE, at B.I.E.T, Davangere on 19<sup>th</sup> – 20<sup>th</sup> April February 2010.
10. Attended “Train The Trainer Workshop”-Campus Connect STAR PRIME in June 2011 at Infosys, Bangalore.
11. Attended two days workshop on “MEDICAL SIGNAL & IMAGE PROCESSING”, organized by Department of Biotechnology & Medical Engineering, National Institute of Technology, Rourkela on 21<sup>st</sup> – 22<sup>nd</sup> of December 2012.
12. Attended “Ramanujan Mathematics Awareness Programme”, held on 1<sup>st</sup> March 2013, at B.I.E.T, Davangere, organized by Department of Mathematics, ISTE Students & Faculty Chapter, BIET and sponsored by ISTE, New Delhi.
13. Attended one day workshop (Theory and lab session) on “LaTeX for Documentation” organized by Department of E&CE in association with VTU, Belgaum held on 9<sup>th</sup> November 2013 at GMIT, Davangere.
14. Attended a technical talk on “Tomosynthesis using Graphic Processor Unit” by Dr. U.C. Niranjana, Director, Manipal Dot Net, Manipal, organized by the Department of Biomedical Engineering on 19<sup>th</sup> February 2014.

15. Participated in the two days workshop on “Women Empowerment” held on 18th & 19th Dec 2014, organized by IS &E Dept, BIET jointly under WPLP programme of ISTE, Delhi.
16. Participated in one day “Workshop on Research Methodology” organized by Research and Development cell of BIET, jointly with ISTE-BIET chapter, Davangere on 28th October 2015
17. Participated in Three-Day Workshop on “Research Methodology & Latex” organized by VTU e-Learning Centre, Mysuru from 18th to 20th February 2016 at BLDEA’s Dr. P. G. Halakatti College of Engineering & Technology, Vijayapura.
18. Attended one day seminar on “Role of Woman in Societal Reforms” organized by Dept. of IS&E in association with ISTE Faculty Chapter, NSS, YRCW, BIET, Davangere on 10th March 2017.
19. Attended Two day AICTE sponsored National level seminar on “IoT’s in Transforming Rural Healthcare System & Point of care Testing” on 8<sup>th</sup> and 9<sup>th</sup> December 2017, organized by the Department of Electronics & Instrumentation Engineering, University BDT College of Engineering, Davangere.
20. Attended an invited talk on “Education in today’s scenario and Role of Educators” by Dr. Gururaj Karajagi, Chairman, Academy of creative teaching, on 19<sup>th</sup> December 2017 at BIET, Davangere.
21. Attended one day Seminar on “WIRELESS COMMUNICATION TECHNOLOGIES IN 5G”, organized at Navodaya Institute of Technology, Raichur on 1<sup>st</sup> March 2019.
22. Attended one day workshop on “eSim, a First Course in the IoT Series for Teachers” on 21st September 2019, held at Bapuji Institute of Engineering and Technology, Davangere organized by Teaching Learning Centre ICT, IIT Bombay, funded by Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Govt. of India.
23. Attended Three Days Workshop on “ PLC and SCADA”, organized by the Department of Electronics and Instrumentation Engineering, Bapuji Institute of Engineering and Technology, Davangere, in association with Prolific Systems and Technologies Pvt Ltd, Bengaluru and ISTE Students Chapter BIET, from 23<sup>rd</sup> October 2019 to 25<sup>th</sup> October 2019.

**Faculty Development Programs (FDP)/Training Programs attended:**

1. Attended six days Faculty Development Program (FDP) on “Applications of LabVIEW in Engineering & Research” conducted by VI Solutions organized by Department of Electronics and Communication Engineering, held from 28<sup>th</sup> January to 2<sup>nd</sup> February 2019 at BIET, Davangere.
2. Attended four days faculty development programme(FDP) on topic “Advances in Biomedical instrumentation for quality Healthcare” from 23<sup>rd</sup> - 26<sup>th</sup> July 2014 in the department of E & IE, UBDTCE Davangere sponsored by VTU Belgaum & VGST, Government of Karnataka.
3. Attended two week workshop on “Signals and systems” conducted by IIT Kharagpur under the National Mission on Education through ICT (MHRD, Govt. of India) at University BDT College of Engineering, Davangere from 2<sup>nd</sup> – 12<sup>th</sup> January 2014.
4. Attended two days Faculty Development Program on “ LOW POWER EMBEDDED SYSTEMS USING MSP430 MICROCONTROLLER”, held from 23<sup>rd</sup> – 24<sup>th</sup> of January 2012, organized by Board of Studies, VTU Belgaum, Texas Instruments, Cranes Software, and Electronics and Communication Engineering Department of Srinivas Institute Of Technology, Mangalore.
5. Attended five days workshop on “MISSION 10X”, organized by WIPRO & ISTE, at B.I.E.T, Davangere from 2<sup>nd</sup> – 6<sup>th</sup> February 2010.

## ***Publications:***

1. Published the research paper titled “Design and Development of Lie Detector” In IJERT, Volume 9, Issue 6 , June – 2020.
2. Published the paper titled “Review on EMG Signal Analysis for Paralyzed Muscles”, in International Journal of Current Research, Vol.11, Issue, 02, February 2019.
3. Published paper titled “Design and development of Microcontroller based Ophthalmic Perimeter” in 6th National Conference on Information Sciences – NCIS 2015 conducted by School of Information Sciences, Manipal University on 27th – 28th March 2015.
4. Published a paper titled “Design & Development of Stress Detector & Sleep Inducer” in International Journal of Engineering Research & Technology (IJERT), Vol 3, Issue 5, May 2014, ISSN 2278-0181,PP.1328-1330.
5. Published a paper titled “Human Fall Detection using MEMS Accelerometer” in International Journal of Emerging Technology & Advanced Engineering (IJETA), Vol 4, Issue 5, May 2014, pp.370-373.ISSN 2250-2459,ISO 9001:2008.Certified Journal.
6. Published the paper titled “Remote Access of Radiological Images using Android” in International Journal of Health system & Disaster Management, Vol 1., Issue 4, Oct-Dec 2013, PP.208-211.
7. Published the paper titled “ Design and Development Of Virtual Eye System For Visually Challenged”, in proceedings of “National Conference On Recent Advances in Electrical And Electronics Engineering NCRAEEE – 2013”, organized by UBDT College Of Engineering Davangere, on 17<sup>th</sup> – 18<sup>th</sup> of June 2013
8. Published the paper titled “Design and Development of Hand Talk System for Deaf and Dumb”, in ‘The special issue of International Journal IJESC (ISSN: 22501371)’, 2013.
9. Published the paper titled “ Design and Development of Hand Talk System for Deaf and Dumb”, in The Proceedings of National Conference on “Recent Advances in Biomedical Electronics Engineering and their Impact on Society (RABEEIS-13)”, held from 16<sup>th</sup> – 18<sup>th</sup> May 2013, Organized by Department of Instrumentation Technology, PDA College of Engineering, Gulbarga.
10. Presented a paper in poster presentation on displaying innovative teaching-learning methodology on the topic “Cardiac Valve Prostheses” at the “Wipro’s Mission 10X Conclave 2011” held at DSCE, Bengaluru on 17th August 2011.
11. Presented Paper “Image Analysis of Dental Tissue and Alveolar Bone Loss for Diagnostic and Therapeutic use” at Symposium on “Bio-resources in the development of Medicine” and 28th Annual Conference of Indian Association of Biomedical Scientist organized by Bharathidasan University at Tiruchirapalli on 20<sup>th</sup> – 22<sup>nd</sup> September, 2007 and published in conference proceedings.