



**SACHIN T. DARJI**



---

Full Name : Sachinkumar Thakorbbhai Darji

Designation : I/C HEAD (From September 2021 onwards), Electronics & Communication (S.F.) Department, Bhailalbbhai & Bhikhabbhai Institute of Technology, Vallabh Vidyanagar-388 120, Gujarat.

Date of Joining : 12<sup>th</sup> June 2006 (Regular Appointment as a Lecturer)  
2004-2006 (Visiting Lecturer)

Email : sachin\_ec453@yahoo.co.in

Teaching Experience : 19 Years 02 Months ( including 2 yrs. Visiting Lecturer)

Areas of Interest : Communication systems, Biomedical Engineering.

Professional Association : Life Member- ISTE (LM 67498)

**Special Achievement:**

**Awarded Gold-Medal by Gujarat Technological University during 3<sup>rd</sup> Annual Convocation held on 16<sup>th</sup> Jan. 2014 for securing first rank with 9.29 CPI in M.E. Communication Engineering.**

## ◆ Participation in Activities at BBIT:

### **Participation in Academic Activities**

1. As Per Order DTE, GoG, prepared **Common Lab Manual** for the GTU Course Digital Electronics (4321102) during February-March 2023.
2. **GTU Diploma curriculum design committee member:** for Course Digital Electronics (4321102) during January 2022. *(As per revised syllabus effective from 2021-22)*
3. Worked as **Co-coordinator and Expert** for three days students' workshop "ARDUINO AND ITS APPLICATIONS" held at B. & B. Institute of Technology, Vallabh Vidyanagar during 14<sup>th</sup> – 16<sup>th</sup> March, 2019.
4. **Co-authored a book** titled "**DATA COMMUNICATION AND NETWORKS**" for diploma IT 4<sup>th</sup> semester students in February 2010 as per GTU curriculum.

### **Participation in Administrative/other Activities**

1. **FRC** (Fee Regulatory Committee) documentation work (year 2010).
2. **AICTE** online data submission process (year 2010).
3. Worked as a **GTU coordinator** for BBIT-605 (S.F.) Component for 5 months (April 2010 to August 2010).
4. **Co-coordinator** during the DTE-ISTE sponsored faculty development one week STTP on "**WEB DEVELOPMENT & WEB HOSTING**" held at BBIT, IT department during 17<sup>th</sup> May 2010 to 21<sup>st</sup> May 2010.
5. **MODROBS PEC (Project Evaluation Committee) member-** MODROBS 2011-12, Communication Laboratory, IT (SF) dept.
6. Appointed as a team member of **GTU Local Inspection Committee (LIC)** for Inspection at Parul Polytechnic Institute, Waghodia, Vadodara. (May-13)
7. **ACPDC verifying officer** during online admission process for ACPDC- Help Center, BBIT on regular basis.
8. **Counselor** during MQ/NRI admission process for BBIT on regular basis.
9. Createo Coordinator (March 2019) for Electronics Group.
10. Worked in Various committees during Annual Day Celebration, BBIT.

## ◆ Educational Details:

- **Master of Engineering** with specialization in Communication Engineering (July 2013) from G. H. Patel College of Engineering & Technology, Vallabh Vidyanagar. (Gujarat Technological University), **CPI: 9.29 (GOLD-MEDALIST)**.
- **Bachelor of Engineering** in Electronics & Communication (2004) from G.H. Patel College of Engineering. & Technology, Vallabh Vidyanagar. (Sardar Patel University), **CPI: 7.63**.
- **Higher Secondary Education** from R.P.T.P. Science College (1999), Vallabh Vidyanagar with **66.92%**.
- **Secondary School Education** from M. U. Patel Technical high school (1997) Vallabh Vidyanagar with **90.43%**.

## ◆ Publications:

### ➤ Books:

1. Co-authored a book titled **“DATA COMMUNICATION AND NETWORKS”** for diploma IT 4<sup>th</sup> semester students in February 2010 as per GTU curriculum.

### ➤ International Conference Paper:

1. Sachin Darji, Rahul Kher, “Motion artifacts detection from ambulatory ECG using Wavelet transform”, *IEEE sponsored International Conference on Intelligent Systems and Signal Processing (ISSP2013)*, GCET, V. V. Nagar, India, ISBN No. 978-81-909376-7-2, pp.57-60, March 2013.

### ➤ International Journal Papers:

1. Sachin Darji and Rahul Kher, “Artificial Neural Network based Classification of Body Movements in Ambulatory ECG signal”, *Journal of Medical Engineering and Technology, Informa healthcare, UK*, vol.37, no. 8, pp. 535-540, November 2013.
2. Darji S, Kher R (September 2014) Classification of Body Movements in Ambulatory ECG Using Wavelet Transform, Adaptive Filter and Artificial Neural Networks. *J Health Med Informat* 5: 170. doi:10.4172/2157-7420.1000170.

## ◆ International/ National Conferences Attended:

- Attended IEEE sponsored International Conference on *“Intelligent Systems and Signal Processing (ISSP2013)”* at GCET, Vallabh Vidyanagar during 1-2 March 2013.

- Attended National Conference on “*Engineering Innovations for Social and Environmental Development*” jointly organized by ISTE Gujarat Section and ADIT, New Vallabh Vidyanagar on 30<sup>th</sup> December, 2017.

#### ◆ Short Term Training Programs Conducted:

- **Co-coordinator** during the DTE-ISTE sponsored faculty development one week STTP on “*WEB DEVELOPMENT & WEB HOSTING*” held at BBIT, IT department during 17<sup>th</sup> May 2010 to 21<sup>st</sup> May 2010.

#### ◆ Short Term Training Programs Attended:

Attended 17 STTPs (Short term training programs) as a part of faculty development program.

- AICTE ISTE sponsored STTP on “Web Technology” conducted by Computer Engineering dept., BBIT during 12-03-2007 to 17-03-2007. **(01 week)**
- Induction Training Program Phase-I at NITTTTR Extension centre, Ahmedabad during 25-05-2009 to 05-06-2009. **(02 weeks)**
- AICTE sponsored staff development program on “Role of Computer/IT applications in Engineering” at computer department, BBIT during 07-12-2009 to 19-12-2009. **(02 weeks)**
- DTE- ISTE approved short term training program on “Circuit Simulation Tools and PCB Design Concepts” jointly organized by ISTE Gujarat Section & BBIT, V.V. Nagar during 04-01-2010 to 08-01-2010. **(01 week)**
- DTE-ISTE approved short term faculty development program on “Web development & Web hosting” at information technology dept., BBIT, V.V. Nagar during 17-05-2010 to 21-05-2010. **(01 week)**
- DTE-ISTE approved short term faculty development program on “Recent Advances in Pedagogy (RAP-2010)” at BBIT, v.v. Nagar during 14-06-2010 to 25-06-2010. **(02 weeks)**
- TEQIP-II Sponsored one week STTP on “*Designing Embedded Systems and Internet of Things*” organized by BVM Engineering College, Vallabh Vidyanagar during December 26-30, 2016. **(01 week)**
- ISTE approved one week STTP on “*IoT with Pi-Duino*” at BBIT, Vallabh Vidyanagar during April 17-22, 2017. **(01 week)**
- AICTE-ISTE approved Induction/Refresher Programme “Advanced Research Methodology” held during 20/05/19 to 25/05/19 organized by Bhailalbhai & Bhikhabhai Institute of Technology, Vallabh Vidyanagar. **(01 week)**
- e-FDP on “Teaching in Uncertain Times : Opportunities & Challenges” held during 30/04/20 to 05/05/20 Jointly organized by GTU & Babaria Institute of Pharmacy. **(01 week-online)**

- Short Training Course (STC) on “Image and Embedded Processing” held during 11/05/20 to 15/05/20 Organized by Electronics and Communication Engg. Department NITTTR, Chandigarh. **(01 week)**
- STTP on “Deep Learning using Medical Data” held during 15-03-21 to 19-03-21 Organized by Finland Labs. **(01 week)**
- STTP on “STATISTICAL ANALYSIS USING R PROGRAMMING” held during 22/03/21 to 27/03/21 organized by GCET, V.V. Nagar. **(01 week)**
- STTP on “Machine Learning using Python” held during 21/02/23 to 05/03/23 organized by Aptronix Technologies. **(01 week)**
- AICTE Recognized FDP on “Tools for Engineering Research” during 19/09/22 to 23/09/22 at NITTTR Remote Centre, BBIT. **(01 week)**
- FDP on “Recent advances in Machine Learning and its Applications using Python” during 13/03/23 to 18/03/23 at BBIT, V.V. Nagar. **(01 week)**
- FDP Programme on “Modern Optimization Techniques in Engineering Research” held during 31.07.2023 to 05.08.2023 organized by Bhailalbhai and Bhikhbhai Institute of Technology, Vallabh Vidyanagar, Gujarat. **(01 week)**

#### ◆ **Workshops Conducted:**

- Worked as Co-coordinator and Expert for three days students’ workshop “ARDUINO AND ITS APPLICATIONS” held at B. & B. Institute of Technology, Vallabh Vidyanagar during 14<sup>th</sup> – 16<sup>th</sup> March, 2019.

#### ◆ **Workshops Attended:**

Attended 08 workshops as a part of faculty development programs.

- One day workshop on “Digital Image Processing and MATLAB Programming” at ADIT, New Vallabh Vidyanagar on 27-03-2012.
- One day workshop on “Antennas, RF circuits and Satellite Communications” at ADIT, New Vallabh Vidyanagar on 25-08-2012.
- Pre-Conference workshop entitled “*Securing Virtual Cloud, Image and Video Exploration Techniques and Power Line Communication*” organized under ISSP 2013 at GCET, V.V. Nagar on 28-02-2013.
- TEQIP-II Sponsored National Workshop on “*Enhancing Research & Development Activities in Technical Institutions*” organized by BVM Engineering College, Vallabh Vidyanagar during February 26-28, 2015.
- KIA workshop on “Team Creativity @ Workplace” at H.M. Patel Institute of English Research and Training, Vallabh Vidyanagar on 07/09/18.

- KIA workshop on “Skills for Student Parenting” at H.M. Patel Career Development Centre, Vallabh Vidyanagar on 26/10/18.
- 02 days webinar on “Advance Excel” during 25/05/20 to 26/05/20 organized by Akash Technolabs and Sigma Institute of Engineering, vadodara. **(Online)**
- Two days workshop on "Environment Policy of BBIT" on 12/05/22 & 07/06/22 organized by Electrical Engineering Department, BBIT under ISTE Chapter.

#### ◆ **Seminars/Symposiums Attended:**

Attended 07 one day Seminars/ Symposiums.

- 12<sup>th</sup> Annual convention of ISTE Gujarat section and one day symposium on “ Excellence in Technical Education Through Innovation” at BVM Engineering college, V.V. Nagar on 20-10-2007.
- Seminar on “Environmental Protection, Industrial Hygiene and Safety” arranged as part of Diamond jubilee celebration of BVM & Vidyog-2008 at BVM on 09-01-2008.
- Seminar on “Alternative Sources of Energy” arranged as part of Diamond jubilee celebration of BVM & Vidyog-2008 at BVM on 11-01-2008.
- 13<sup>th</sup> Annual convention of ISTE Gujarat section and one day seminar on “ Autonomy & Accountability of Technical Education in Changing Scenario” at Atmiya Institute of Technology & Science, Rajkot on 18-10-2008.
- One day Symposium on “SWOT analysis of Training & Placement cell” jointly organized by IIPC & ISTE Chapter, BBIT on 06-03-2009.
- One day Symposium on Antenna, Microwave and Communication (OSAMC 2009), jointly organized by AP/MTT chapter of IEEE Gujarat section & IEEE student branch ADIT, New Vidyanagar on 01-08-2009.
- “Symposium on Communication Technologies-2012” at GCET, Vallabh Vidyanagar on 03-11-2012.

#### ◆ **Languages/Softwares:**

- MATLAB, Electronics Workbench, VHDL (Quartus- II)
- Programming Languages: C, C ++
- Assembly Level Programming: 8085, 8051, 8086

#### ◆ **Subjects Taught During Academic Tenure :**

1. Data and Computer Communication
2. Object Oriented Technology
3. Microprocessors and Assembly Language Programming
4. Office Automation

5. Data Communication
6. Computer Oriented Numerical Methods
7. Electronics Materials and Components
8. Digital Electronics and Microprocessors
9. Electronics Practices
10. Wireless Communication
11. Data Communications and Networks
12. Fundamentals of Digital Electronics
13. Basic Electronics
14. Fundamentals of Information Technology
15. Information Communication Networks
16. Information Communication Technology
17. Electronics Components and Practice
18. Basic of Computer and Information Technology
19. Electronics circuits and Applications
20. Contributor Personality Development
21. Digital Logic Design
22. Principles of Electronics Communication
23. Circuit Design Tools
24. Digital Communication
25. Mobile Communication
26. VLSI Design
27. Entrepreneurship and Industrial Management
28. Fundamentals of Electronics (*new syllabus w.e.f. 2021-22*)
29. Basics of Information and Communication Technology (*new syllabus w.e.f. 2021-22*)
30. Fundamentals of Electronics Engineering (*new syllabus w.e.f. 2021-22*)
31. Basics of Digital Electronics (*new syllabus w.e.f. 2021-22*)
32. Principles of Electronics Communication (*new syllabus w.e.f. 2021-22*)
33. Digital Communication (*new syllabus w.e.f. 2021-22*)

◆ **Work Experience:**

1. Visiting Lecturer in Information Technology Dept. of BBIT, Vallabh Vidyanagar from June 28, 2004 to April 15, 2006.
2. Lecturer in Information Technology Dept. of BBIT, Vallabh Vidyanagar from June 12, 2006 to August 02, 2017.
3. Lecturer in EC (S.F.) Dept. of BBIT, Vallabh Vidyanagar from August 03, 2017.
4. I/C Head, EC (S.F.) Dept. BBIT, Vallabh Vidyanagar from 01/09/2021 onwards.