# **BIO DATA**

**1. Date of Birth** : 8/5/1977

**2. Date of Joining** : 12<sup>th</sup> Oct.2007

**3. Highest Qualification** : M. Tech

**4. Designation** : Assistant Professor

**5. Date of Joining** : 12/10/2007

#### 6. Research Ares of Interest :

• Wireless Communication, Signal Processing, Image/Video Compression and transmission

## 7. Research Paper Publications:

#### **International Conference/seminar:**

#### 2009

- [1] Ms Jigisha Patel, Binod, Ashish, Jhanak, "Wireless Lan: Security threats, Issues and Best Practices", ICSCI 2009, Dr MCR HRD Institute Jubilee hills, Hyderabad, Pp 386-392, Vol.1, 7-10 2009.
- [2] Ms Jigisha Patel, Mr Amit Degada," Channel Estimation and Rake reception for 3G Air interface WCDMA", ARTCOM 2009, Kottayam, Kerala, Sponsored by IEEE Computational Intelligence Society, pp 351-356, 27-28 Oct 2009.
- [3] Prof Jigisha Patel, Ms Khyati Desai "Review of Peak to Average Power Ratio Reduction Techniques in OFDM, ICETET-09, G.H Raisoni College of Eng, Nagpur, Poster Presentation, 16-18 Dec 2009.
- [4] Prof Jigisha Patel, Ms Vaibhavi Lineswala" JPEG Image compression and telecommunication over wireless channel "International conference on ACT-2009, Trivandrum, Kerala, pp 641-643, 28-29 Dec, 2009.
- [5] Prof Jigisha Patel, Ms Khyati Desai, "SLM and Modified SLM scheme for PAPR Reduction for OFDM systems" ICSSA-2009,GCET, Vallabhvidyanagar, 28-29,Dec-2009.
- [6] Prof Jigisha Patel, Mr Swapnil shah, "FPGA Implementation of OFDM Modem", ICSSA-2009, GCET, Vallabhvidyanagar, 28-29, Dec-2009.



## 2007

[7] Ms Jigisha Patel, Mrs Upena Dalal," A comparative performance analysis of OFDM using MATLAB simulation with M-PSK and M-QAM mapping", ICCIMA 2007, Shivakashi, IEEE CS Press, pp 407-411, Vol. IV, 13-15 Dec. 2007

### **National Conférence:**

### 2009

- [8] Ms Jigisha Patel, Mr Veerana, "Admission Control Framework For UGS service IEEE 802.16(WiMAX) Broadband Wireless Network", National Conference on Futuristic Advancements in Computing & Electronics, Deccan college of Engineering & Technology, Hyderabad, Pp 45-49, Vol 1, 19-21 MAR 2009.
- [9] Ms Jigisha Patel, Mr Amit Degada," Simulation of WCDMA Downlink Transmitter operating in FDD mode" National conference on Advanced Communication Technologies & Application, Geetangali Institute of Technical Studies Dabok, Udaipur, Vol. 1, 13-14 May 2009.
- [10] Ms Jigisha Patel, Mr Veerana," Control Framework For RTPS service IEEE 802.16(WiMAX) Broadband Wireless Network" National conference on Advanced Communication Technologies & Application, Geetangali Institute of Technical Studies Dabok, Udaipur Pp 92-95,Vol: 1,13-14 May 2009.
- [11] Prof Jigisha Patel, Mr Swapnil shah, "FPGA Implementation of QAM Modem", 2<sup>nd</sup> National Conference on Emerging Trends in Information Communication Technologies, C.U. Shah college of Eng & Technology, Surendranagar, Gujarat, Pp 90-92, Vol 1, 19 April 2009.
- [12] Prof Jigisha Patel, Ms Khyati Desai, "PAPR reduction Technique SLM for OFDM", IETE conference of RF & wireless, IETE centre Banglore 7-10,Oct 2009

## 2008

[13] Ms Jigisha Patel, Mr J N Sarvaiya," Convolution Coded OFDM – Performance Analysis includes Interleaver for different Code Rate", National conference on Advance Communication Technique, Alagappa chettiar college of Engg. & Technology, Karaikudi, Tamilnadu, Pp 45, Vol 1, 9 March 2008.

- [14] Ms Jigisha Patel, Mr J N Sarvaiya, Ms Shilpi Gupta"Comparison of MIMO Channel Capacity with various Wireless Channel models" National conference on Technological Innovation, BRCM College Of Engg. & Tech, Bhiwani, Haryana, India, Pp 262-264, Vol 1,11-12 OCT 2008.
- [15] Ms Jigisha Patel, Mr Veerana," Connection Admission Control Framework with QoS Support for IEEE 802.16(WIMAX) Broadband wireless Network", Advancement in wireless technologies & its applications, SVNIT, Surat, Pp 50-55, Vol1, 18-19 DEC 2008
- [16] Ms Jigisha Patel, Mr Amit Degada, "Channel Adaptive Hybrid ARQ/FEC for Robust Video transmission over 3G Mobile Communication", Advancement in wireless technologies & its applications, SVNIT, Surat, Pp 50-55, Vol1, 86-89, DEC 2008.

## 8. M Tech Dissertation Supervision:

- (i) Mr Amit Degada, "Simulation of 3G air interface WCDMA" (2008-09)
- (ii) Mr Veerana, "CAC Frame with QOS support for IEEE 802.16 Broad band Wireless Network" (2008-09)
- (iii) Mr Swapnil Shah, "VLSI based OFDM" (2008-09)
- (iv) Ms Khyati Desai, "PAPR Reduction Techniques in OFDM (2009-10)
- (v) Ms Vaibhavi Lineswala, "Compressed Image/Video transmission through wireless channel (2009-10)

#### 9. STTPs/Conferences Organized:

- (i). AICTE sponsored short term training programme on Microwave Integrated Circuits, **as a Co-coordinator**, at ECED, SVNIT during 16-20 June, 2008.
- (ii). AICTE, DST, CSIR sponsored National Conference on "Advancements in Wireless Technologies and Applications-AWTA08", **as an Organizing Committee member** at ECED, SVNIT during18-19 Dec. 2008.
- (iii). AICTE sponsored, National level short term course on "Advance Laboratory Techniques in RF & Microwaves" as **an Organizing Committee member** at ECED, SVNIT during 22-26 Dec. 2008.
- (iv). SMDP-II, MCIT,GOI sponsored National level workshop on "VLSI Design tools" **as an Organizing Committee member at** ECED SVNIT, during 28<sup>th</sup> Feb to 1<sup>st</sup> March 2008.

- (v). AICTE sponsored short term training programme on Nanotechnology and Application as an **Organizing Committee member** at ECED, SVNIT during 16-20 June, 2008.
- (vi). AICTE sponsored short term training programme on Teaching with MATLAB & Simulink, as a Co-coordinator at ECED, SVNIT during 21-25 Dec.2009.

#### 10. STTPs/Conferences Attended:

#### a. STTP Attended:

- AICTE sponsored National level short term course on Advance Communication Systems at ECED, SVRCET during 25/12/01 to 29/12/01.(1 week)
- **2** GUJCOST sponsored STTP on Digital Stereography at ECED, SCET, Surat during 28/6/04 to 3/7/04. (1 week)
- 3 ISTE sponsored STTP on Artificial Intelligence: A Modern Approach at ECED, SCET, Surat, during 2/5/05 to 7/5/05. (1 week)
- 4 TEQIP Sponsored workshop on Simulation of Communication Systems at ECED, SVRCET during 20/1/06 to 22/1/06. (3 Day)
- 5 ISTE sponsored STTP on Emerging Trends in wireless Communication Computing at ECED, SCET, Surat during 1/1/07 to 5/1/07.(1 week)
- 6 TEQIP sponsored STTP on VLSI & Embedded Systems at CITD, Hyderabad, during 17/12/07 22/12/07 1 week
- 7 EQUATE organized STTP on Induction Trainig Programme for newly recruted Faculty at SVNIT during 21/1/08 23/1/08 1 week
- **8** EQUATE organized STTP on Pedagogy Training at SVNIT during 12/5/08 to 15/5/08.(1 week)
- 9 EQUATE Training on Research Methodology in Enginneering at SVNIT, during 16/5/08 to 17/5/08. (1 week)
- MHRD, Finishing school programme on "Faculty Induction programme" SVNIT, Surat during 15/12/08 19/12/08. (1 week)
- AICTE sponsored STTP on "Advanced Engineering Optimization Through Intelligent Techniques" MED, SVNIT, Surat during 22/12/08 26/12/08. (1 week)
- 12 IUCEE Sponsored STTP on Teaching with MATLAB and Simulink, at Infosys, Mysore Training center during 22/6/09 26/6/09. (1 week)

## (b) Seminar/Conference Attended:

- 1 Tektronix & Auto.Sys organized one day programme on Engg. Cutting Edge Technology & Test Measurment, at LD college, Ahmedabad 6/10/2000.(1 day)
- 2 TEQIP organized two day training programme on Application of code Composer Studio for TMS 67XX Family, at SVRCET during 21/5/2005 to 22/5/2005. (2 Days)
- 3 Agilent Technology sponsored one day workshop on Agilent Measurement Technology, at Hotel pride, Ahmedabad during 12/11/2008. (1 Day)
- 4 IE & IETE Regional seminar on Wireless Communication and Networking Technologies at Vaswik Bhavan, Vadodara during 21/12/2008. (1 Day)
- 5 IE & IETE Regional seminar on Wireless Communication and Networking Technologies ,Security Bhavika Bhavan , Ahemadabad, 21/2/2010.(1 Day)

## 11. Administrative Responsibilities:

#### a. Current

- 1 Time Table Committee member
- 2 Communication Lab Co-In charge
- 3 Subject Coordinator: Digital Circuits, Signal & Systems M. Tech level:- Wireless Communication, Mobile Network
- 4 Guided B Tech level projects, M Tech Level Dissertation
- 5 Registration Committee Member(B Tech IV Year)
- **6** As a Continuous Evaluation Observer for Lab session
- 7 Annual Report committee of Electronics Department member

## **Institute Level activities**

- 1 ECED representative member for purchasing MATLAB at institute level
- Work as Co-opted member in Institute level scrutiny committee for direct recruitment of Non teaching position

### b. Past

- 1 Electronics System Design Lab CO-In charge
- 2 Seminar exam Co-Coordinator for B Tech IV(2007-2009)

### 13. Extra-Curricular Activities:

• External Practical Examiner

• As a Jury member of National Level Paper contest

## 14. Any other Information:

(i) Life time Membership of IETE- Membership No. 64703

### (ii) Award / Prize Received:

- Merit Medals to the outstanding Engg. Graduates, selected for Late Daliba Jalejar Bhagat Merit Medal in Electronics Engg, The Institutions of Engineers (India), South Gujarat Local centre-1999
- Gold Medal, for securing highest CGPA in M.Tech. (Electronics Engg. with specialization in Commu. systems) for all the semesters. SVNIT, Surat-2007
- Best Paper Award: Wireless Lan: Security threats, Issues and Best Practices International Conference on Systematic Cybernetics and Informatics, ICSCI 2009 Organized by Pentagram Research center Pvt, ltd. Dr MCR HRD Institute Jubilee hills, Hyderabad.

## 15. Books/Monographs/Article Contributions:

(i) Review one book of TMH publication , Wireless and Mobile Network security, Year- 2009