

## BIO-DATA

- Name** Dr. Sunita Aniruddha Patil(Ugale).
- Date of Birth** 28<sup>th</sup> June 1975
- Designation** Asso. Professor in E &TC Engg
- Address** Sai Sadan, Sharanpur Road,  
Tilak wadi, Nashik-422002



### 5. Educational Qualifications :

Sr. No	Degree Awarded	University/Institution	Year of passing	Subject	Marks obtained
1.	Ph. D.	SVNIT, Surat	2014	Electronics	-
2.	M. Tech.	DOEACC formerly known as CEDTI, Aurangabad.	2004	Electronics Design Technology	79%
3.	B.E.	University of Pune.	1996	Electronics	63%

### 6. Employment Record (Starting from present position)

Sr. No	Designation	Institution / Organization	Period	
			From	To
1.	Assoc. Prof.	K. K. Wagh College of Engg. Nashik	1.8.2012	Till date
2.	Asst. Prof.	K. K. Wagh College of Engg. Nashik	24-08-09	31.7.2012
3.	Sr. Lecturer	K. K. Wagh College of Engg. Nashik	01-07-07	23-08-2009
4.	Lecturer	K. K. Wagh College of Engg. Nashik	01-07- 96	30-06-2007

### 7. Work Experience:

- Worked as an active **member in Board of Studies of Electronics** at Pune University.
- Received “**Lady Engineer Award**” from Institution of Engineers, IEI, Nashik Local center on the occasion of Engineers day celebration 2008.
- Recognized as a **Post-Graduate Teacher** in subject of Electronics & Telecommunication.
- Worked as Board member for annual Magazine of college.
- Worked as committee member for Earn & Learn Scheme.
- Worked as an Anti Ragging Squad member.
- Lab In Charge of Communication Engineering Lab.
- Worked In Different Committees of Annual Social Gathering.

9. Worked as an Active member in Campus Beautification committee of college.
10. Working as Time Table Coordinator for department since last ten years.
11. Obtained grant of **Rs. 50,000/-** from **Pune University** for college level equipment purchase under Quality Improvement Program & working as a co-ordinator for the same.
12. Developed **Virtual Laboratory** for digital Electronics, for the benefit of students. The student can check the results for various circuit conditions without making changes in the hardware in less time with this concept.
13. Prepared Printed Journals for Lab Practices of different subjects to reduce unnecessary time in copying the theory related to Practicals.
14. Guided approximately 40 final year projects at UG level and 6 at PG level.
15. Guided approximately 100 mini-projects of third year students of engineering.
16. Organized National level Symposium “**ENANTIOSIS**”, & worked as a co-ordinator for circuit design competition event for the same.
17. Organized District level **Miniproject Competition “EUREKA”**, for TE students for last 2 years & worked as a co-ordinator for the same.
18. Guided the project “**CRO Based Game**” for national level project competition Techfest 2007, which got **first prize at IIT, Powai**.
19. Worked as coordinator for National level congregation “**Telekinesis2012**”.
20. Worked as a judge for **State level Paper Presentation Competition SPARKIT 2013**.
21. Invited as a judge for **State level project competition MVP-ELICIT 2013**.
22. Invited as a judge for National level project competition ProUtsav 2013 at K. K. Wagh Polytechnique Nashik.
23. Worked as a **co-convener for ePGCON14**, an annual conference conducted by board of studies (Electronics), University of Pune, for post graduate students of Electronics and E&TC Engineering to present their dissertation work in the form of paper.(23<sup>rd</sup>-24<sup>th</sup> March 2014)
24. Invited as a **session chair** for Conference on Wireless Communication & Android Applications “**WiCAA-15**” at KVNNIEER.
25. Worked as **coordinator for Telekinesis2K15**, a national level congregation at E&TC department of K. K. Wagh IEER, Nashik (13<sup>th</sup>-14<sup>th</sup> March 2015).
26. Developed course Optical Communication under the project named “**National Mission Project on Education through ICT**”, hosted by IIT, Kharagpur.

#### **Reviewer:**

Working as a reviewer for the international journals:

1. Sensors & Actuators: B. Chemical
2. SCIENCEDOMAIN International
3. Zeitschrift fuer Naturforschung A, Tuebingen

Worked as a reviewer for conferences:

1. IEEE International Conference for convergence of Technology 2014.
2. cPGCon14, an annual conference conducted by board of studies (Electronics), University of Pune, for post graduate students of E&TC Engg.

3. ePGCon14, an annual conference conducted by board of studies (Electronics), University of Pune, for post graduate students of Computer Engg.
4. IEEE International conference ET2ECN2014.
5. International Conference I2CT2015.
6. International Conference ICRTET2015.

#### **Consultancy:**

Following projects are designed & implemented successfully.

- [1] Development of SERIM Inverter for EPCOS (India) Pvt. Ltd, Nashik
- [2] Development of AC to DC Adapter with special interfacing for EPCOS (India) Pvt. Ltd., Nashik
- [3] DSP based display & keyboard interfacing card for supporting main card of CNC machine for Kouger Technologies, Ambad Nashik.
- [4] Development of “Microcontroller based Cyclic Timer for device control” for SST systems, Nashik.

#### **Expert Talks:**

- Expert Lecture on “ Fiber Optics Communication” for E&TC Dept. of K. K. Wagh Women’s Polytechnique, Nashik, in July 2012.
- Expert lecture on “ Digital Signal Processing” for K. K. Wagh Computer Science college, Saraswati Nagar, Nashik.

#### **Research Grant:**

Got sanction of financial assistance of Rs. 34, 40,000/- for the project entitled “Development of intelligent optical bio-chemical sensor using optical fiber gratings” (DST/ TSG/ PT/ 2011/ 195-G) by Government of India, Department of Science and Technology.

#### **Subjects Taught at UG Level:**

Optical & Microwave Communication, Opto Electronics, Digital Signal Processing, Advanced digital signal processing, VLSI Design, Digital Design & Computer Organization, Electronic System Design.

#### **Subjects Taught at PG Level:**

Analog digital CMOS IC Design, Advanced Digital system Design, System On Chip, Reconfigurable computing, Digital CMOS Design, ASIC Design.

#### **A) List of Publications:**

##### SCI Journals:

- [1] Modeling and characterization of fiber Bragg grating for maximum reflectivity, Optik - International Journal for Light and Electron Optics, Vol. 122, No. 22, pp 1990-1993, 2011.
- [2] Optimization of Reversible LPFG for Sensing Application, Optik -International Journal for Light and Electron Optics, Vol.125, No.1, pp 111– 114, 2014.

- [3] Formation and Characterization of Non Uniform Long and Ultralong Period Reversible Optical Fiber Gratings , Optik -International Journal for Light and Electron Optics, Vol. 125, No. 15, pp 3822-3824, 2014.

International Journals:

- [1] "Implementation of Encoder for PCM Telemetry using FPGA" is CIT JOURNAL OF RESEARCH(CITJR).
- [2] "Digital Watermarking Techniques" CIT JOURNAL OF RESEARCH(CITJR)
- [3] Fiber Bragg Grating Modeling, Characterization and Optimization with different index profiles, International Journal of Engineering Science and Technology Vol. 2(9), 2010, 4463-4468.
- [4] Optimization of Apodized Fiber Bragg Grating for Sensing Applications, Special issue of international journal of computer applications(0975-8887) on electronics, information and communication engineering –ICEICE No. 3, Dec 2011.
- [5] Higher Order Diffraction Characteristics of Fiber Bragg Grating, International Journal of Electronics Communication and Computer Engineering Volume 4, Issue 1, ISSN (Online) : 2249–071X, ISSN (Print): 2278–4209
- [6] Tunable optical filter based on mechanically induced cascaded long period optical fiber grating, Hindawi Publishing Corporation, Journal of Photonics Volume 2013, doi:10.1155/2013/415059
- [7] Pressure Sensor Based on Mechanically Induced LPFG in Novel MSM Fiber Structure," Optics and Photonics Journal, Vol. 3 No. 3, 2013, pp. 225-228. doi: 10.4236/opj.2013.33036
- [8] Fabrication and Characterization of Ultra long period Reversible fiber Gratings", **Journal of Optics** Volume 43 Number 3, pp169-172 ( 2014), ISSN 0972-8821, DOI 10.1007/s12596-014-0201-1.
- [9] Optimization of Reversible LPFG for Sensing Application, Optik -International Journal for Light and Electron Optics, Vol.125, No.1, pp 111– 114, 2014.
- [10] Tunable optical filter based on mechanically induced cascaded long period optical fiber grating, Hindawi Publishing Corporation, Journal of Photonics Volume 2013, doi:10.1155/2013/415059
- [11] Efficient Migration to Windows , Journal of software, JSW 2015 Vol.10(8): 1030-1036 ISSN: 1796-217X, doi: 10.17706/jsw.10.8.1030-1036
- [12] Model Transformation: Concept, Current Trends and Challenges International Journal of Computer Applications (0975 – 8887) Volume 119 – No.14, June 2015
- [13] Implementation of Robust HOG-SVM based Pedestrian Classification International Journal of Computer Applications (0975 – 8887) Volume 114 – No. 19, March 2015, ISBN : 973-93-80885-86-6.
- [14] "A Review on Day-Time Pedestrian Detection," SAE Technical Paper 2015-01-0311, 2015, doi:10.4271/2015-01-0311.
- [15] "A Digital Motor Protection Relay for HT Motors" International Journal Of Research In Electronics And Computer Engineering IJRECE Vol. 2 Issue 4 Oct-Dec 2014 ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281 (ONLINE).

- [16] Liquid Identification Using e Tongue International Journal of Modern Trends in Engineering and Research Volume 2, Issue 7, [July-2015] Special Issue of ICRTET'2015 e-ISSN No.:2349-9745, Date: 2-4 July, 2015
- [17] Fingerprint Recognition Using Level 3 Features, International Journal of Advanced Research in Computer and Communication Engineering Vol. 3, Issue 6, June 2014.
- [18] Modeling and Simulation of Different Types of Faults in Semiconductor Memories, International conference on Recent Trends in Engineering & Technology, at SNJB's COE, Nashik, March 2014.
- [19] Implementation of Text Encryption and Decryption in Advanced Encryption Standard", ASM International Journal of Ongoing Research in Management and IT e-ISSN-2320-0065, Pune, 2013.

#### International Conference:

- [1] 'Role of Internet in Technical Education' National Conference 2003, KCT Coimbatore.
- [2] "Artificial grape drying by optimized technique" International Conference, 2004 at COE, Pune.
- [3] Real time motion tracking', International conference(2004)COE, Pune
- [4] Paper Titled "Implementation of DSP Based five axis CNC Machine control" International conference ICSCI-2006, Pentagram Research center, Hyderabad.
- [5] "Implementation of DSP Based five axis CNC Machine supporting card for interfacing high & low speed peripherals" International conference ICSCI-2006, Pentagram Research center, Hyderabad.
- [6] Optimization of Fiber Bragg Grating Length for maximum reflectivity. IEEE, International conference on communications and Signal Processing ICCSP 2011, 978-1-4244-9799-7/11/\$26.00 ©20 11 IEEE
- [7] Optimization of Apodized Fiber Bragg Grating for Sensing Applications. ICEICE 2011 International conference on Electronics, information and communication system Engineering, M. B. M. Engineering college, JNV Univ., Jodhpur.
- [8] Modeling and Characterization of Cascaded Long Period Fiber Gratings for ADM Application, International conference IMPACT2011, 978-1-4577-1107-7/11/\$26.00 ©2011 IEEE
- [9] Ultralong Period Reversible Fiber Gratings as a Pressure Sensor, ICAC2013, ICAC3 2013, CCIS 361, pp. 439–443, 2013. © Springer-Verlag Berlin Heidelberg 2013.
- [10] Formation and Characterization of Mechanically Induced MZI in Optical Fiber" Emerging Technology Trends in Electronics, Communication and Networking (ET2ECN), 2014 2nd International Conference on DOI: 10.1109/ET2ECN.2014.7044954 , Publication Year: 2014 , Page(s): 1 - 3 978-1-4799-6986-9/14 ©2014 IEEE

#### National journals

- [1] "GSM in Railways" Telecommunications, the Indian Journal of telecommunication Vol/Issue-56/1, Jan-Feb 2006, India.

- [2] E-Nose for gas detection at vehicle exhaust using supervised learning algorithm”, International Journal of Emerging Trends & Technology in Computer Sciences(ISSN 2278-6856), Vol. 1, Issue 4, Nov-Dec 2012
- [3] Implementation of Text Encryption and Decryption in Advanced Encryption Standard”, ASM International Journal of Ongoing Research in Management and IT e-ISSN-2320-0065, Pune, 2013.

#### National Conference

- [1] E-Nose for fire identification and classification”, National conference on emerging trends in Electronics and Telecommunication Engineering, Watumull IIECT, Worli, Mumbai, 16-17 Sept. 2011.
- [2] E-Nose for gas detection at vehicle exhaust using supervised back propagation learning algorithm, National conference Epgcon-2012, Pune.
- [3] Secure speech transmission using audio steganography, National conference ePGCON 2012.
- [4] “Implementation of Text Encryption and Decryption in Advanced Encryption Standard”, ASM International Conference of Ongoing Research in Management and IT, Pune, 11, 12, 13 January, 2013.
- [5] Advanced Encryption Standard Implementation Using DSP Processor and Code Composer Studio”, National Conference ePGCON-2011 held at Pravaranagar College of Engineering at Loni on 20-21 March 2013.
- [6] Fingerprint recognition using level 3 features National Conference ePGCON-2011 held at Pravaranagar College of Engineering at Loni on 20-21 March 2013.

#### **B) Books:**

- [1] “**Electrical Circuits & Machines**” for Electronics and E& TC Engineering second year students of Pune University in February 2005 by Central Techno Publication, Nagpur.
- [2] **Fiber Optical Communication: Systems and Components**”, 1<sup>st</sup> ed., Wiley India,(2012).
- [3] **Fiber Optical Communication: Systems and Components**”, Precise text book for AKU, Wiley India,(2014).

#### **C) Other publications:**

- A technical article, “A three phase fully controlled converter”, published in a refereed journal on laboratory experiments, LE Lab Experiments vol-9, No. 3, Sept 2009.
- Lab journal for YCMOU, B. Tech course students of 11<sup>th</sup> semester(available online on YCMOU website).

#### **Specialized Training Courses/workshop/Seminar/Conference**

Sr. No	Institute / Organization	Seminar/ Workshop attended	Duration
1.	K.K.W.I. E.E.R, Nasik	Refresher course on AutoCAD	10 days course
2.	C.O.E. Pune	Workshop on Bio-Medical Instrumentation	27 <sup>th</sup> to 31 <sup>st</sup> Dec 1998

3.	K.K.W.I. E.E.R, Nasik	Industry Institute Interaction	2 days course
4.	K.K.W.I. E.E.R, Nasik	Entrepreneurship development. Organized by ISTE chapter Nasik.-3	3 Days
5.	Pune Institute of Engineering & Technology. C.O.E. Pune	International Conference on Instrumentation	19 <sup>th</sup> to 21 <sup>st</sup> Dec. 2004
6.	K.K.W.I. E.E.R, Nasik	Workshop “Environment Awareness & Pollution Control”	26 <sup>th</sup> July 2004
7.	K.K.W.I. E.E.R, Nasik	CSI-IBM Seminar	23 <sup>rd</sup> Dec. 2004
8.	Pune Institute of Engineering & Technology (C.O.E. Pune)	International conference IMAE05	7 – 8 <sup>th</sup> Jan 05
9.	Siemens (India) Pvt Ltd, Nashik	Industrial Training	7 <sup>th</sup> Feb 2005 to 10 <sup>th</sup> Feb 2005
10.	PICT, Pune	Teaching Methodology for 1 <sup>st</sup> term TE E&TC	21 <sup>st</sup> April 2005
11.	Smt. Kashibai Navale College of Engg. Sinhgad, Pune	AICTE approved short term training programme on .NET technologies	24 <sup>th</sup> to 28 <sup>th</sup> Nov 2005
12.	Maharashtra Academy of Engineering, Pune	Teaching Methodology for 2 <sup>nd</sup> term TE E&TC	27 <sup>th</sup> Dec 2005
13.	Pentagram Reasearch Center, Hydrabad	International conference ICSCI-2006	4 <sup>th</sup> to 8 <sup>th</sup> Jan 2006
14.	IETE, Nashik Subcenter	Technical seminar on IT for industrial control, business network	4 <sup>th</sup> March 2006
15.	N. D. M. V. P’s College of Engineering, Nashik	Electronic-Waste Management	13 <sup>th</sup> March 2006
16.	Vidya Pratisthan COE, Baramati	Teaching Methodology for 1 <sup>st</sup> term BE E&TC	14 <sup>th</sup> July 2006
17.	Sinhgad COE, Pune	Workshop on VLSI	29 <sup>th</sup> July 2006
18.	N. D. M. V. P’s college of engineering, Nashik	Mobile Computing	25 <sup>th</sup> Jan. 2007
19.	Workshop on “Instructional Methodologies of Syllabus of SE( E&TC/ Electronics)- 2008-SemI”	Sandip Foundations SITRC, Nashik	13 <sup>th</sup> July 2009
20.	Workshop on “Syllabus Reforms for TE(E&TC/ Electronics)	D Y Patil C O E, Akurdi, Pune	12 <sup>th</sup> Sept 2009
21.	Workshop on “Syllabus detailing of SE-2008-Sem II”	SGREF’s COE Chas, Ahmednagar	12 <sup>th</sup> Jan 2010
22.	Seminar on “DSP Applications”	IETE Nashik subcenter & IE(I) Nashik local center	10 <sup>th</sup> April 2010
23.	NI LabVIEW Semiar on	National Instruments	29 <sup>th</sup> April 2010

	‘How to reduce Application Development time and costs’		
24.	International Conference on communication and signal processing ICCSP2011	National Institute of Technology, Calicut, Keral, India	10 <sup>th</sup> -12 <sup>th</sup> February 2011.
25.	Workshop on “Revision of Syllabus for B.E(Electrical)”	K. K. Wagh IEER, Nashik	6 <sup>th</sup> April 2011
26.	Workshop on detailing of B.E. syllabus.	KKWIEER and BOS in Electronics, Pune university	16 <sup>th</sup> July 2011
27.	Need based education course meeting at MUHS, Regional center, Pune	Maharashtra University of Health Sciences, Nashik	20 <sup>th</sup> Oct. 2011
28.	International conference on Multimedia, signal processing and Communication Technologies, IMPACT2011	Aligarh Muslim University, Aligarh, UP	17 <sup>th</sup> to 19 <sup>th</sup> December 2011
29.	One day certified Programme on Intellectual Property(IP) and Patent Life Cycle Management (PLM)	K. K. Wagh IEER, Nashik	10 <sup>th</sup> March 2012
30.	Two days ISTE workshop on “ Research Methods in Educational Technology”	Conducted by IIT Bombay under the National Mission on Education through ICT (MHRD)	2 <sup>nd</sup> & 9 <sup>th</sup> Feb 2013.

Prof. Sunita Aniruddha Patil  
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