

## Sangeeta Parshionikar

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A-42, "PARIJAT",  
Bandra Reclamation,  
Bandra (W), Mumbai – 400 050

### Synopsis:

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- **18+ years** of experience in **Field of Education**
- **3 years** of Industry experience in **VLSI Design**

### Education:

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#### PhD( Computer Engineering, KL University, AP) - Pursuing

Mumbai University

Fr. Conceicao Rodrigues College of Engineering

**ME in Electronics with distinction (75.56%)**

Mar 2014

Nagpur University

Shri. Ramdeobaba Kamla Nehru Engineering College

**BE in Electronics and Power Engineering (72.8%)**

July 99

Other Professional Courses:

**VLSI Design ('A' Grade)**

Aug 02, CDAC Hyderabad

**Diploma in Oracle 8.0 with Visual Basic 6.0**

Apr 2000, SSI Nagpur

### Teaching Experience:

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#### 1). Assistant Professor, Fr. Conceicao Rodrigues College Of Engineering, Bandra

July 2007 – Till Date

**Subjects:** Deep learning, Internet of Things, Verilog Programming, Basic VLSI Design, ASIC Verification, Basic Electrical and Electronic Engineering, Computer Organization, Digital system Design, Community

#### 2). Lecturer, Shri. Ramdeobaba Kamla Nehru Engineering College, Nagpur

Jul 01, 00 to May 31,01

Subjects: Electrical Technology and Instrumentation, Digital Design

#### 3). Lecturer, Lady Anusayabai Daga College, Nagpur.

Sept 3, 99 to June 30, 00

Subjects: Electrical Engineering and Network Theory

## VLSI Design Industry Experience:

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- ❖ Name of Organisation: **PowaiLabs Pvt. Ltd., Mumbai.**  
Designation : **Product Testing Team Lead**  
Duration : 1<sup>st</sup> Mar'2006 – June' 2007
- ❖ Name of Organisation: **Taray Technology Pvt. Ltd., Hyderabad.**  
Designation : **Design Engineer**  
Duration : 13<sup>th</sup> Sep'2005 – 13<sup>th</sup> Dec'2005
- ❖ Name of Organisation: **STRATeL Microsystems Pvt. Ltd., Delhi.**  
Designation : **Member of Technical Team**  
Duration : 1<sup>st</sup> June'2004 – 31<sup>th</sup> Aug'2005

## Achievements:

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Published **Indian Patent** titled “**Verbal Agreement signing using Blockchain and Speech recognition**” (Application no. 202321015188)

Published **Indian Patent** titled “**Metastore - An image based 3D garment making system for virtual try-ons**” (Application No. 202321018653 )

Received **Minor Research Grant** from University of Mumbai for the project “**Smart Air Pollution Monitoring system in Urban Environment**”, 2017- 18.

Received **Minor Research Grant** from University of Mumbai for the project “**Stock Market Forecasting using Neural Network Implementation on FPGA**”, 2018 -19.

Received **Minor Research Grant** from University of Mumbai for the project “**Smart Soil analyzer using IoT**”, 2018 -19.

**Topper (5%) NPTEL online course on “Machine Learning”, Jan - Mar 2023**

Received **appreciations** from the college for successfully coordinating the **workshops and FDPs.**

## Interaction/ Talks Delivered:

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Delivered a session in ISTE approved one week STTP on “ **System Design using FPGA**” on 21<sup>st</sup> Jan 2025.

Delivered a session in ISTE approved one week STTP on “**Hands on session on FPGA Programming**”, on 22<sup>nd</sup> Jan 2025.

Conducted a workshop on “**Towards FPGA: From HDL to Tapeout**” on January 31, 2024.

Delivered a session on “ **Verilog Programming**” at AICTE sponsored ATAL FDP on 11<sup>th</sup> December 2023.

Delivered a session on “Verilog Programming”, for 2<sup>nd</sup> Year ECS Department students 1<sup>st</sup> Novemeber 2023

Delivered a IIC (Institute Innovation Cell) session on “Branding for Startups , on 10<sup>th</sup> February 2022.

Delivered a IIC session on “Branding and Promotion of Startups”, 2021

Delivered a **Lecture on ”Introduction to VHDL and Its Scope**”, for an event conducted by WIE – IEEE, Fr. CRCE, Bandra.

## Responsibilities Handled:

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**CRCE Rotaract Club Coordinator** for the year 2024 -25  
**Community Engagement Projects Mentor** since June 2024  
**Coordinator ISRO IIRS for a nodal centre Fr. CRCE, Bandra** since August 2022  
**Department Newsletter In-charge** since 2022  
**Members of Research & IPR cell** of Institute from July 2022.  
**Convocation Coordinator** for the year 2022, 2021, 2020, 2019, 2018, 2017.  
**B. E. Project coordinator** for the department of Computer Engineering.  
**IIC Social Media Coordinator** for the year 2019- 20, 2020 - 21.  
**Coordinator – Syllabus Committee** for the subject of ASIC Verification

## Interaction:

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**Paper setter for various subjects of Mumbai University.**

**Reviewer for the ICDIDSA-23, Nov 29 - 30, 2023**, International Conference on Deep Learning, IoT, Drone Technologies and Smart Cities at Sandip Institute of Technology and Research Centre, Nashik, MH, India.

**Reviewer for reputed journal like Cancer Medicine, Biocybernetics and Biomedical Engineering, International Journal of Electrical and Computer Engineering Systems etc.**

**Reviewer for the IEEE-ICAST - 2022**, K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai.

**Reviewer for the CSCITA2023**, International Conference at St. Francis Institute of Technology, Borivali, Mumbai

**Reviewer for the ICAC3**, International Conference at Fr. CRCE Bandra.

**Hindi section Editor** for College magazine FRAGMAG for the year 2010 – 2011.

**Conducted workshop and FDPS.**

**Coordinator – Registration Committee** - International Conference ICAC3'19 , ICAC3'21

## Paper Published:

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- Sangeeta Parshionikar, S S Rathod, “ An Activity to reduce Solid Waste by Engineering Students: A step Forward to accomplish a Swachh Bharat mission”, International Conf on Climate Change ISBN 978-93-48606-60-0
- S. Parshionikar, A. Verulkar and A. Katkar, "Intellihealth – A Secured Decentralized Electronic Health Record System using Blockchain," *2024 IEEE International Conference on Blockchain and Distributed Systems Security (ICBDS)*, Pune, India, 2024, pp. 1-6, doi: 10.1109/ICBDS61829.2024.10837083.
- R. Gonsalves, S. Patil, S. Pradhan and S. Parshionikar, "Medisense: An Advanced Health Tech Application Using Generative AI," *2024 International Conference on Artificial Intelligence and Quantum Computation-Based Sensor Application (ICAIQSA)*, Nagpur, India, 2024, pp. 1-6, doi: 10.1109/ICAIQSA64000.2024.10882418
- Sangeeta Parshionikar, Debnath Bhattacharyya, An enhanced multi-scale deep convolutional orchard capsule neural network for multi-modal breast cancer detection”, *Healthcare Analytics*, Volume 5, 2024, 100298, ISSN 2772-4425, <https://doi.org/10.1016/j.health.2023.100298>.

<https://www.sciencedirect.com/science/article/pii/S277244252300165X>

- Parshionkar, S., Tripathi, R., Shetty, S., Sharma, P., Shah, T. (2024). AutoProc - AI Based Automated Exam Proctoring System with Test Score Analysis. Proceedings of the International Conference on Internet of Everything and Quantum Information Processing. IEQIP 2023. Lecture Notes in Networks and Systems, vol 1029. Springer, Cham. [https://doi.org/10.1007/978-3-031-61929-8\\_27](https://doi.org/10.1007/978-3-031-61929-8_27)
- S. Shaikh, K. W. Pereira, S. Sahay, A. Lopes and S. Parshionkar, "An Extensive Review: Models For Regional Language Speech Recognition," *2024 4th Asian Conference on Innovation in Technology (ASIANCON)*, Pimari Chinchwad, India, 2024, pp. 1-8, doi: 10.1109/ASIANCON62057.2024.10837903.
- Parshionkar, S., Bhattacharyya, D. (2023). Remote Breast Cancer Patient Monitoring System: An Extensive Review. In: Ogudo, K.A., Saha, S.K., Bhattacharyya, D. (eds) Smart Technologies in Data Science and Communication. Lecture Notes in Networks and Systems, vol 558. Springer, Singapore. [https://doi.org/10.1007/978-981-19-6880-8\\_12](https://doi.org/10.1007/978-981-19-6880-8_12) pg no 117-128
- Larry Lopes, Rudolf Dmello, Sangeeta Parshionkar , "Secured Electronic Voting System using Blockchain Technology", *Taijun Jishu Journal of Propulsion Technology*, Vol. 45 No. 01 (2024), DOI: <https://doi.org/10.52783/tjjpt.v45.i01.5365>
- A paper "A Chat - bot as a First Responder for Panic Attack", Sangeeta Parshionkar, Archana Lopes, Trupti Shah, *Gradiva Journal*, Vol 8, Issue 11, 2022, Page no. 253 -258
- A paper on "SKIN TYPE CLASSIFIER", Aditya Chaurasia, Nihal Jha, Sangeeta Parshionkar, *International Journal of Scientific Research in Engineering and Management (IJSREM)* Volume: 06 Issue: 12, December - 2022 ISSN: 2582-3930
- A paper on "Comparative Analysis of Deep Learning Techniques for Credit Card Fraud Detection", 2021 7th IEEE International Conference on Advances in Computing, Communication and Control, ICAC3 2021, and published in IEEE Xplore.
- A paper on "Skin Cancer Detection and Severity Prediction Using Computer Vision and Deep Learning" is presented at Second International Conference on Sustainable Technologies for Computational Intelligence and published in *Advances in Intelligent Systems and Computing*, vol 1235. Springer, Singapore. [https://doi.org/10.1007/978-981-16-4641-6\\_25](https://doi.org/10.1007/978-981-16-4641-6_25)
- A paper on "Verification of 32-bit Memory using Layered Testbench with Optimum Functional Coverage and Constrained Randomization" published in *Next Generation Information Processing System. Advances in Intelligent Systems and Computing*, vol 1162. Springer, Singapore. [https://doi.org/10.1007/978-981-15-4851-2\\_25](https://doi.org/10.1007/978-981-15-4851-2_25).
- A paper on "Efficient Portable Camera Based Text to Speech Converter for Blind Person", presented at International Conference on Intelligent Sustainable Systems (ICISS), 2019. And published in IEEE Xplore. November 2019, ISBN:978-1-5386-7800- DOI: [10.1109/ISS1.2019.8907995](https://doi.org/10.1109/ISS1.2019.8907995).
- A paper on "Generating hardware fingerprint of FPGA using physically Unclonable function", presented in International Conference on Recent Innovation in Electrical, Electronics and Communication Engineering, KIIT Bhubaneswar 27<sup>th</sup> & 28<sup>th</sup> July 2018.
- A paper on "Early detection of Heart disease using BRANN" published in *IJCRT* Volume6, Issue 2, April 2018. DOI: <http://doi.org/10.1729/IJCRT.17983>

- A Paper on “Design and FPGA Implementation of High Speed UART”, International Journal of Scientific and Engineering Research (IJSER) Volume 7, Issue 9, September 2016 Edition (ISSN 2229-5518) Pg no 106 - 110.
- A paper on “Design and analysis of 8×8 Static RAM”, International Journal of Scientific and Engineering Research (IJSER) Volume 6, Issue 7, July 2015 Edition (ISSN 2229-5518) Pg no 338 - 342.
- A paper on “Leakage Power Reduction using Multi Threshold Voltage CMOS Technique”, International Journal of Scientific and Engineering Research (IJSER) Volume 4, Issue 10, October 2013 Edition (ISSN 2229-5518) Pg no 1077 - 1080.
- A paper on “Standby leakage power reduction techniques in Deep Sub micron CMOS VLSI circuits”, IJCA and presented the same in International Conference on Communication Technology ICCT held in DJ Sanghvi College of Engineering, October 2013.

### **FDPs & Workshops Conducted:**

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1. One week **AICTE Sponsored ATAL FDP on “Semiconductor Digital System Design & Verification”** December 11- 16, 2023.
2. Two week **Value added course** on “Fundamentals of Verilog Programming”, 13<sup>th</sup> July to 31<sup>st</sup> July 2023.
3. Two Week **AICTE Sponsored Short Term Training Programme** on "Research Areas in Technologies for Rural and Societal Development", December 21, 2020 - January 01, 2021.
4. One week FDP on “Advancements in IoT”, 29<sup>th</sup> May to 3<sup>rd</sup> June 2020.
5. Two day workshop on “Hands on FPGA applications”, 23<sup>rd</sup> and 24<sup>th</sup> Feb., 2018
6. Two day workshop on " IC Technology:Layout to simulation" on September, 4<sup>th</sup> -5<sup>th</sup> , 2015.
7. Two day workshop on “Challenges in VLSI Design”, 13 – 14 March, 2015.
8. Two day workshop on “Industrial Automation” on March 11<sup>th</sup>-12<sup>th</sup> ,2010

### **Professional Training:**

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- **NPTEL courses:**
  1. **ATAL AICTE Training and Learning academy FDP on “Deep Learning and It’s Applications”**, from 16/12/2024 to 21/12/2024.
  2. **ATAL AICTE Training and Learning academy FDP on “Research and Innovation Trends in Large Language Models”** from 20/01/2025 to 25/01/2025.
  3. Completed all **8 Modules of NITTT** (National Initiative for Technical Teachers Training)
  4. 12 weeks **NPTEL online course on “Deep Learning”, Jan - April 2023**
  5. 8 weeks **NPTEL online course on “Machine Learning”, Jan - Mar 2023 (5% Topper)**
  6. 4 weeks **NPTEL online course on “Python for Data Science”, July - Aug, 2022. (75%)**
  7. 12 weeks **NPTEL online course on “Introduction to IOT”, Jan - Apl 2020 (96%)**
  8. 8 weeks **NPTEL online course on “Introduction to Research”, Feb 2018 – April 2018**
  9. 8 weeks **NPTEL online course on “Enhancing Soft skill & Personality”, Feb 20, 2017 – April 14, 2017**
  10. **ATAL AICTE Training and Learning academy FDP on “AI/ ML in VLSI Design”,**

Dec 04- 09, 2023.

11. **ATAL AICTE Training and Learning academy FDP on “Deep Learning for NLP”**, 15/11/2021 to 19/11/2021.
12. **ATAL AICTE Training and Learning academy FDP on “Object detection and Recognition using Deep Learning Techniques”**, 08/11/2021 to 12/11/2021
13. **Innovation Ambassador training** conducted by MoE’s Innovation cell and AICTE, 30<sup>th</sup> June - 30<sup>th</sup> July 2021.

• **STTP/FDP Courses :**

14. A one week FDP on” **ASIC Verification with System Verilog**”, at SPIT Andheri, Dec 21 -26.2015.
15. Attended ISTE approved one week STTP on “**Accreditation & Quality Assurance, Outcome based Education**”, at Fr. CRCE, Bandra, Nov 17 – 21, 2014.
16. Attended AICTE sponsored National level STTP on "**VLSI and Embedded Systems**" at Fr. CRIT Vashi, July 01 - 05, 2013.
17. One week ISTE STTP on "**Tools and techniques for effective technical writing**" at K.J. Somaiya College of Engg. Vidyavihar, May 13 -17, 2013.
18. A two week graded STTP on “**Basics Electronics**” conducted by **IIT, Bombay**, July 2011.
19. A one week STTP on “**Image Processing Applications :Basics to Advanced**” at St. Francis Institute of Technology, January 2010.
20. A one week STTP on “**Electromagnetic Waves and Its Applications**”, at SPIT June 2009
21. A Two week STTP on “**Robotics and its Applications**”, at Fr. CRCE, Dec. 2007.

**Other Software Skills:**

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Language	: Python, Verilog, VHDL, System Verilog, HSpice., C – programming, Oracle, VB 6.0
Packages	: MS Office 2000, MS Visio
Operating Systems	: Windows, Linux, MS-DOS

**Personal Information:**

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Date of Birth	: 17 <sup>th</sup> April 1978
Marital Status	: Married
Languages	: English, Hindi, Marathi
Personal Interest	: Music, Meditation, Yoga, Reading