

# Curriculum Vitae

**Name: Dr. Shilpa Prashant Kodgire**

**Address:** Plot No. 26, Bunglow no. 1, 'Tirumala', Deccan Sanskruti  
Nath Prangan, Garkheda, Aurangabad

**E-mail:** [shilpa.kodgire@mit.asia](mailto:shilpa.kodgire@mit.asia), [spkodgire@gmail.com](mailto:spkodgire@gmail.com)

**Mobile:** 9765392454

**Date of Birth:** 03/07/1976



## Academic Credentials

Class/ Degree	Specialization	Institution	University	Year	%/CGPA	Class
Ph.D.	Electronics	NIELIT, Aurangabad	Dr. B.A.M. University, Aurangabad	Aug- 2018	A++ <b>Grade in course work</b>	
M.E./ M. Tech.	Electronics	J.N.E.C. Aurangabad	Dr. B.A.M. University, Aurangabad	2004	<b>64.44%</b>	First
B.E./B.Tech.	Electronics	C.E.C. Chandrapur	NAGPUR University	1997	<b>75.52%</b>	First with Distinction

## Academic Projects

**M. Tech. Project:** Microcontroller based Intensive care Warmer.

**Ph. D. Research:** "Network on Chip Communication Architecture Analysis, Evaluation and Optimization for 2D Mesh Topology"

## Patent

1. Granted Patent-

Title- "Smart IOT based Women Safety detecting Wrist Band"

This design patent has been accepted and published in Indian Patent Journal No. 39/2022 on Journal date 30/9/2022

## 2. Published Patents-

1. Title- “AI based Automatic smart healthcare system for fertility preservation for woman with Brest Cancer, Sugar and Pressure using image processing and Deep learning algorithms.”
2. Title- “Solar Flower with sun tracking”
3. Title- “An Intelligent Hygienic shopping system with Automated Trolleys and Stacks”
4. Title- “Smart IoT based system integrated with Artificial Intelligence Framework for prediction of Air and Water Pollution

### Key Research Areas:

- VLSI
- Embedded System
- IOT
- Signal Processing

### Experience

Sr. No.	Organization	Post	From To	No. of Years
1	NEXA Embedded Systems and Solutions, Aurangabad	Product Engineer	1/7/1997-31/5/2000	2 yrs 10 months
2	S.B. Science College, Aurangabad	Lecturer	14/6/2000-30/4/2002	1 yr 9 months
3	MIT Aurangabad	Visiting Lecturer	15/7/2002-30/8/2003	1 yr 2 months
4	MIT Aurangabad	Trainee Lecturer	1/9/2003-18/10/2003	3 months
5	MIT Aurangabad	Lecturer	15/12/2003-31/6/2007	3 Years
6	MIT Aurangabad	Sr. Lecturer	1/7/2007-31/7/2007	1 months
7	MIT Aurangabad	Assistant Professor	1/8/2007-31/12/2010	3 yrs 5months

8	MIT Aurangabad	Associate Professor	1/1/2011- till date	From 1 <sup>st</sup> Jan 2011 till date
---	----------------	---------------------	------------------------	---

#### List of Courses Taught/Teaching at UG level

- Microprocessor and Peripherals
- Digital Signal Processing
- Microprocessors and Microcontrollers
- Advanced Digital Signal Processing
- VLSI
- Advanced microcontroller Systems
- Advanced Embedded System Design
- Basic Electronics Engineering
- Digital System Design

#### List of Courses Taught/Teaching at PG level

- Real Time Operating System
- Research Methodology
- High Speed Analog Circuit Design
- CMOS VLSI
- Advanced Communication System

#### Additional Assignments/Duties

Sr. No.	Name of portfolio/Assignment	Name of Organization	Period
1.	ISO Internal Auditor	MIT-E	March 2004- Dec 2006
2.	NBA Internal Auditor	MIT-E	March 2004- Dec 2006

3.	Dr. B.A.M. University Exam Understudy	MIT-T	May-June 2006
4.	Member- Direct Second Year Admission Committee	MIT-E	2005- 06,2006-07
5.	In charge of Setting up New Labs of Electronics and Telecommunication Engg. Department and Instrumentation and Control Engg. Dept.	MIT-T	March 2006- April2007
6.	Chairman- Direct second Year Admission Committee	MIT-T	2011-12
7.	Cultural Coordinator – Kalavihangam 2012 Finance and Accounts Committee –Chairman- Kalavihangam 2019	MIT-T	2012 2019
8.	Chairman - central Class Test and Term work verification Committee	MIT-T	2011-12
9.	Chairman –preparing Shikshan Shulk Committee Report	MIT-T	2011-12, 2012-13
10.	Chairmen- Central Time table	MIT-T	2008
11.	Member- Ladies Redressal Cell	MIT-E	2005-06, 2006-07
12.	Chairperson- Ladies Redressal Cell	MIT-T	2007-08
13.	Chairmen Syllabus Revision of Third year of B.Tech Courses of Maharashtra Institute of Technology	MIT-T	2009-10
14.	Dr. B.A.M.U. Vigillance Squad Examination	MIT-T	Nov-Dec 2010, May 2017, Dec 2017, May 2018
15.	AICTE Coordinator	MIT-E	2012-2015
16.	NBA Convener	MIT-E	2012-2016
17.	Central Coordinator for all PG Courses	MIT-E	Aug 2012- Dec 2012

18.	Chief Superintendent Dr. B.A.M. University	MIT-E	Dec-Jan 2012-13 May- June- 2022
19.	CII/ AISHE SURVEY Coordinator	MIT-E	2012-15
20.	Member Secretary IQAC	MIT-E	2012-15
21.	Library Committee Chairmen	MIT-E	2012-13
22.	Member IQAC	MIT-T	2016-18
23.	Soft Skill Development Cell	MIT-T	2016-18
24.	Class Test and Term work marks verification and submission to University and Post submission correspondence and compliance if any	MIT -T	2018-20
25.	Competitive Examination Cell	MIT-T	2018-20
26.	Academic Monitoring Committee	MIT-T	2019-20
27.	Internal Compliance Committee	MIT-T	2019-20
28.	Preparation of proposal for Autonomous status	MIT-T	2019-20
29.	NEET 2020 Chief Superintendent	MIT-T	2020
30.	Presiding Officer ICC	MIT	2018- 19,2019-20, 2021-22, 2022-23

### Membership of Professional Bodies

1. Associate Member of The Institution of Electronics and Telecommunication Engineers with membership number **AM 177677** from 2<sup>nd</sup> Sept 2005
2. Life member of The Indian Society for Technical Education with membership number **LM 41100** from 2004
3. Member of International Association of Engineers with membership number **195851** from 15<sup>th</sup> Aug. 2017

### Research Projects/Projects Guided

1. Touchless Fingerprint Recognition
2. An Automated Recognition of Fake or Dust-Royed Indian Currency Notes Using Machine Vision
3. Design and Implementation of 32-BIT RISC MIPS Processor on FPGA
4. PSoC Based Isolated Speed Recognition System
5. An Accelerometer based Digital Pen with a trajectory recognition algorithm for Handwritten Digit
6. A LOW Power Dual Modulus Prescalar
7. Design and Implementation of Anti Pinch System for Window Lift

### Computer/Software Proficiency

<b>Xilinx ISE</b>	VHDL and Verilog RTL Design
<b>MATLAB</b>	Signal Processing
<b>Synopsys</b>	ASIC Design flow
<b>Keil</b>	8051 and ARM IDE
<b>Emu, Tasm</b>	8086 Assembler
<b>QUESTASIM</b>	VLSI FRONT END DESIGN SIMULATION
<b>PSoC</b>	DESIGN A SYSTEM ON CHIP BY USING SYPRESS PSOC 5
<b>Programming Language</b>	Embedded C, PYTHON
<b>Embedded IDE</b>	32

### Seminar/Workshop/Industrial Training/STTP//FDP/CEP/Conference Attended

- Attended a one-day workshop on “**Information Theory & Coding**” at college of Engineering Ambejogai on 26<sup>th</sup> Aug.2004.
- Attended a four days’ workshop on “**Embedded System design on MSP 430**” at MIT Aurangabad by Gill Instrument Bangalore on 13<sup>th</sup> to 16<sup>th</sup> Sept 2004.
- Attended a four days’ workshop on “**Linux Systems and Network Administration**” at MIT Aurangabad in association with LANSMART Technologies, Mumbai on 5<sup>th</sup> and 6<sup>th</sup> Jan 2005
- Attended a short-term training program on “**Microcontroller Systems, Programming and Applications**” at Govt. college of Engg. Aurangabad on 17<sup>th</sup> to 19<sup>th</sup> March 2005

- Attended a DTE sponsored training program on “**Developing Teaching Competencies**” from 20<sup>th</sup> June 2005 to 1<sup>st</sup> July 2005 at NITTTR Pune center.
- Attended a one-day workshop on “**Embedded Systems and RTO’S**” at Govt. college of Engg. Aurangabad on 30<sup>th</sup> Sept. 2005
- Attended a two-day workshop on “**Introduction to programming in MATLAB**” at MIT Aurangabad from 10-11 July 2006
- Attended a ten-day workshop on “**Advanced Web Page Design and Multimedia**” at MIT Aurangabad from 16<sup>th</sup> July - 26<sup>th</sup> July 2006.
- Attended a two-day workshop on “**Tanner Tools Pro (A Complete VLSI design system)**” at S.G.G.G.S Nanded from 24<sup>th</sup> - 25<sup>th</sup> September 2006
- Attended a three days STTP on “**Implementation of Digital Design on FPGA Device**” at MIT Aurangabad from 3<sup>rd</sup> -5<sup>th</sup> Jan 2008.
- Attended a two days’ workshop on “**Embedded Systems & Robotics**” at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad from 24<sup>th</sup> – 25<sup>th</sup> March 2008.
- Attended three days National Level workshop on “**Digital Signal Processor & Applications**” at Modern College of Engineering, Pune from 14<sup>th</sup> -16<sup>th</sup> Oct.2008
- Attended a three days STTP on “**Challenges in CMOS VLSI Design**” at MIT Aurangabad from 8<sup>th</sup> -10<sup>th</sup> Nov 2008.
- Attended a three-day international workshop on “**Global ICT Standardization Forum for India**” at Sinhgad Institute of Technology from 19<sup>th</sup> -21<sup>st</sup> March 2008.
- Attended Five Days STTP on “**DSP in Advanced Communication**” at Hi-Tech College of Engineering Aurangabad from 23<sup>rd</sup> Nov-27<sup>th</sup> Nov 2009
- Attended Five Days Workshop on “**Image and Video Processing using MATLAB**” at Smt. Kashibai Navle Engineering College, Pune from,30<sup>th</sup> Dec 2009-3<sup>rd</sup> Jan 2010
- Attended One day Workshop on “**Effective Research Methodology**” at Marathwada Institute of Technology, Aurangabad on 7<sup>th</sup> Feb-2010
- Attended Two Days Workshop on “**Labview Programming**” at Maharashtra Institute of Technology, Aurangabad on 17<sup>th</sup> -18<sup>th</sup> Nov. 2012
- Attended Two Days Workshop on “**Akash for Education**” at Maharashtra Institute of Technology, Aurangabad on 10<sup>th</sup> -11<sup>th</sup> Nov. 2012
- Attended One Week Training on “**Synthesis, Timing, Analysis, Place and Route**”, for Synopsys Software by Synopsys Training Centre Bangalore from 17 June – 21 June 2013

- Attended a two-day Tutorial Workshop on” **Network Theory and Design**” at International Center of Excellence in Engg. And Management, Aurangabad on 1<sup>st</sup>-2<sup>nd</sup> July,2013
- Attended One Day Workshop on “**National Program on Technology Enhancement Learning (NPTEL)**”, at JNEC Aurangabad on 17<sup>th</sup> July,2013
- Attended Two Days Workshop on “**Research Methodology**” at Maharashtra Institute of Technology, Aurangabad from 9<sup>th</sup> -10<sup>th</sup> Aug. 2013
- Attended One Week TEQIP-STTP Workshop on” **Soft Computing Tools and its applications in Engineering**” at Government College of Engineering Aurangabad from 3<sup>rd</sup> - 7<sup>th</sup> June, 2013
- Attended Two Days Workshop on “**Network Security**” at Deogiri Institute of Engg and Management Studies, Aurangabad, from 10<sup>th</sup> – 11<sup>th</sup> Jan, 2014
- Attended One Day Workshop on “**Phase I NBA on Outcome Based Accreditation**” at Government College of Engineering Aurangabad on 3<sup>rd</sup> Feb 2014
- Attended Three Days Workshop on “**Phase II NBA on Outcome Based Accreditation**” at Government College of Engineering Aurangabad on 22<sup>nd</sup> -24<sup>th</sup> Feb 2014
- Attended One WEEK STTP ON “**Emerging Trends in VLSI & Embedded Systems: A SOC Approach**” at Annasaheb Dange College of Engineering& Technology, Ashta
- Attended One Week workshop on “**Advances in VLSI Signal Processing**” at IIT Kharagpur from 21 Dec2015-26<sup>th</sup> Dec2015
- Attended One Week Short Term Training Program on “**MATLAB & SIMULINK**” at Chh. Shahu College of Engineering, Aurangabad from 6-11 June 2016
- Attended Five days’ Workshop on “**FPGA Prototyping with XILINX Tools**” at NIELIT, Aurangabad from 14-18 June 2016
- Attended One Week Faculty Development Program on “**INTERNET OF THINGS (IoT)**” Marathwada Institute of Technology, Aurangabad from 11-16 July 2016
- Attended Two-Week Short-Term Training Program on “**CMOS MIXED SIGNAL AND RADIO FREQUENCY VLSI DESIGN**” conducted by IIT Kharagpur under National Mission on Education through ICT (MHRD, GOI) at Marathwada Institute of Technology, Aurangabad from 30<sup>th</sup> Jan—04<sup>th</sup> Feb 2017
- Attended Two Days Workshop on “**Outcome Based Education**” Organized by Internal Quality Assurance Cell (IQAC) on 4 & 5 December 2017 at Maharashtra Institute of Technology, Aurangabad.



<ul style="list-style-type: none"> <li>• Attended AICTE approved Faculty Development Programme FDP 101x on “<b>Foundation Program in ICT for Education</b>”, Conducted by IIT Bombay from Aug 2017- Sept.2017</li> </ul>
<ul style="list-style-type: none"> <li>• Attended AICTE approved Faculty Development Programme FDP 201x on “<b>Pedagogy for Online and Blended Teaching –Learning Process</b>”, Conducted by IIT Bombay from Sept.2017-Oct 2017</li> </ul>
<ul style="list-style-type: none"> <li>• Attended Two days’ workshop on “Intellectual Property Rights”, in association with Marathwada Accelerator for Growth &amp; Incubation Council, CMIA and Institution Innovation council, Maharashtra Institute of Technology, Aurangabad, on 21<sup>st</sup> December &amp; 22<sup>nd</sup> December 2018</li> </ul>
<ul style="list-style-type: none"> <li>• Attended Two days’ workshop on “Internet of Things (IoT) USING Arduino”, conducted at Indo German Tool Room, Aurangabad 20<sup>th</sup> July 2019 to 21<sup>st</sup> July 2019</li> </ul>
<ul style="list-style-type: none"> <li>• Attended NPTEL-AICTE Faculty Development Program on “Embedded System Design with ARM” in Jan- Mar2019</li> </ul>
<ul style="list-style-type: none"> <li>• Attended NPTEL-AICTE Faculty Development Program on “Teaching and Learning in Engineering (TALE)” in Feb- Mar2019</li> </ul>
<ul style="list-style-type: none"> <li>• Attended Two days’ workshop on “INTERNET OF THINGS (IOT) using ARDIUNO” at INDO GERMAN TOOL ROOM, Aurangabad from 20<sup>th</sup> July to 21<sup>st</sup> July 2019.</li> </ul>
<ul style="list-style-type: none"> <li>• Attended NPTEL-AICTE Faculty Development Program on “TALE:2 Course Design and Instruction of Engineering Course” in Jul – Sept 2019</li> </ul>
<ul style="list-style-type: none"> <li>• Attended NPTEL-AICTE Faculty Development Program on “Introduction to Internet of Things” in Jul- Oct 2019</li> </ul>
<ul style="list-style-type: none"> <li>• Two days’ workshop on “INTERNET OF THINGS (IOT) using ARDIUNO” at INDO GERMAN TOOL ROOM, Aurangabad from 20<sup>th</sup> July to 21<sup>st</sup> July 2019</li> </ul>
<ul style="list-style-type: none"> <li>• NPTEL-AICTE Faculty Development Program on “TALE:2 Course Design and Instruction of Engineering Course” in Jul – Sept 2019</li> </ul>
<ul style="list-style-type: none"> <li>• NPTEL-AICTE Faculty Development Program on “Introduction to Internet of Things” in Jul- Oct 2019</li> </ul>
<ul style="list-style-type: none"> <li>• One week FDP on ‘Arduino’ by Rajashri Shahu College of Engineering, Pune from 25/4/20-30/4/20</li> </ul>
<ul style="list-style-type: none"> <li>• One Week FDP on “Artificial Intelligence” at Universal College of Engineering from 22/5/20-26/5/20</li> </ul>

- One-week online FDP on “Signal, Image and Video Processing: A Practical Approach” at Government College of Engineering, Karad from 26/5/20-30/5/20
- One week FDP on “Problem Based Learning” at JSPM’S Rajashri College of Engineering, Pune from 1/6/20-5/6/20
- FDP on “Advanced Computing and Communication Technology for Industry 4.0” at Dwarkadas Sanghavi College of Engineering, Mumbai from 12/6/20- 13/6/20
- One week FDP on “Modern Education Tools and Pedagogical Practices for Online Teaching” at Vidyalankar Institute of Technology, Mumbai from 21/6/20-25/6/20
- AICTE Sponsored Online workshop on Universal Human Values on “Inculcating Universal Human Values in Technical Education” from 21/9/20-25/9/20
- Online Induction/Refresher program on “Machine Learning and Pattern Recognition” (Phase-II) AICTE-ISTE sponsored at SSBT COLLEGE OF Engineering and Technology, Jalgaon from 7/11/20-12/11/20
- ATAL FDP on “Design Thinking” from 7/12/20-11/12/20 at Vidyalankar Institute of Technology, Mumbai
- ATAL FDP on “Augmented Reality and Virtual Reality in Real Time Application” at Karunya Institute of Technology and Science, Kerala, From 7/6/21-11/6/21
- AICTE and ISTE sponsored One-week online Induction/Refresher programme on “Data Science and its Application” from 30<sup>th</sup> Dec – 5<sup>th</sup> Jan 2022, at Abha Gaikwad Patil College of Engineering, Nagpur
- AICTE-ISTE Approved Orientation/ Refresher Programme on “Drive Digital Transformation-The Leading-Edge Technology” held during 18Feb 2022 – 24 Feb 2022, Jawaharlal Nehru Engineering College, MGM University, Aurangabad Maharashtra.
- One week FDP on “Outcome based Teaching Learning” at Pravara Rural Engineering College, Loni from 21-25/3/2022
- Faculty Development Programme on “Current Research Trends in Computer Engineering” from 28/3/22- 1/4/22 at Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
- ISTE approved Online/SF-STTP/FDP on “Data Science and its Real-Life Applications” from 8-13/4/22 at PES College of Engineering, Aurangabad, M.S.
- AICTE approved ATAL workshop on “Designing and Modelling of IoT, AI, ML Systems”, Organized by ATAL Academy, ARM Education and STM Microelectronics from 1<sup>st</sup> to 5<sup>th</sup> Aug.2022

<ul style="list-style-type: none"> <li>• AICTE recognized FDP on “Engineering Optimization using MATLAB” organized by NITTTR Chandigarh from 31<sup>st</sup> Oct- 4<sup>th</sup> Nov 2022</li> </ul>
<ul style="list-style-type: none"> <li>• Five days FDP on “AWS, AZURE, DEVOPS &amp; DATA SCIENCE” organized by Sinhgad Institute of Technology, Lonavala in association with LWP LABS LLP from 21<sup>st</sup> Nov. to 25<sup>th</sup> Nov 2022.</li> </ul>
<ul style="list-style-type: none"> <li>• Training program on “Entrepreneurship and Innovations” jointly organized by Faculty of Commerce- Parul University- Gujrat, Research foundation of India &amp; RFI CARE from 22<sup>nd</sup> Jan to 28<sup>th</sup> Jan 2023.</li> </ul>
<ul style="list-style-type: none"> <li>• One-week short term training program on “Recent Trends and Challenges in Artificial Intelligence and Machine Learning” organized by Department of Artificial Intelligence and Center of Excellence Artificial Intelligence and Machine Learning G. H. Rasoni college of Engineering, Nagpur from 30<sup>th</sup> Jan to 3<sup>rd</sup> Feb 2023.</li> </ul>
<ul style="list-style-type: none"> <li>• FDP on Python 3.4.3 organized by Maharashtra Institute of Technology, Aurangabad with course material provided by Spoken Tutorial Project IIT Bombay from 19<sup>th</sup> June -24<sup>th</sup> June 2023.</li> </ul>
<ul style="list-style-type: none"> <li>• AICTE recognized FDP on “Artificial Embedded Systems” organized by NITTTR Chandigarh from 24<sup>th</sup> July-28<sup>th</sup> July 2023</li> </ul>
<ul style="list-style-type: none"> <li>• One Week STTP on “Generative Artificial Intelligence and Natural Language Processing” Organised by Center of Excellence AI &amp; ML and Department of AI of G.H. Rasoni College of Enfgineering , Nagpur, During 2<sup>nd</sup> Jan – 6<sup>th</sup> Jan 2024</li> </ul>
<ul style="list-style-type: none"> <li>• FDP on EV- Dynamics and Electric Motor Drives by NPTEL- AICTE on Jan- March 2024</li> </ul>
<ul style="list-style-type: none"> <li>• One-week FDP on Industry Led Innovation &amp; Cutting-Edge Technology at MSFDA, Pune in collaboration with VU Pune from 1/4/24-5/4/24</li> </ul>
<ul style="list-style-type: none"> <li>• Two Week “NEP 2020 Orientation and Sensitization Programme” under Malviya Mission Teacher Training Programm of UGC at UGC Malviya Mission Teacher Training Center, Rashtrasant Tukdoji Mharaj Nagpur University, Nagpur from 2<sup>nd</sup> Mar- 16<sup>th</sup> March 2014</li> </ul>

### **Industrial Trainings Attended**

<b>One Week</b>	Training on “Synthesis, Timing, Analysis, Place and Route”, for Synopsys Software by Synopsys Training Centre Bangalore from 17 June – 21 June 2013
<b>One Day</b>	<b>Technical Training at Endress+ Hauser Flowtec (India) Pvt. Limited, 25<sup>th</sup> July 2019</b>
<b>Self-Paced Training</b>	<b>MATLAB Onramp completed on 15/1/22 through MATLAB Training Services</b>
<b>Self-Paced Training</b>	<b>MATLAB Fundamentals completed on 15/1/22 through MATLAB Training Services</b>
<b>Self-Paced Training</b>	<b>Wireless Communication Onramp completed on 16/3/22 through MATLAB Training Services</b>
<b>Self-Paced Training</b>	Python 3.4.3 course material provided by Spoken Tutorial Project IIT Bombay from 19 <sup>th</sup> June -24 <sup>th</sup> June 2023.
<b>One Week</b>	Attended Training Program on Website Development and Design parameter, at SEVEN WEB DESIGNS Pune from 1 <sup>st</sup> Jan- 6 <sup>th</sup> Jan 2024

#### **Seminar/Workshop/Industrial Training/STTP//FDP/CEP/Conference organized**

- Worked as Convener National Conference on Signal Processing -2009
- Worked as Co-convener 7<sup>th</sup> National ISTE Student Convention Maharashtra –Goa Section
- Worked as Joint Organizing Secretary 1<sup>st</sup> International Conference Digital Signal and Image Processing 2017
- Worked as Convener for Event SciClone 2017
- Worked as Convener for Event SciClone 2018
- Worked as Convener for National level conference on “Recent Trends in Engineering-Innovate” 2012
- Worked as Convener for national level event “Techtrophy”2010
- Worked as Convener for national level event “Techtrophy”2011
- Worked as Organized EXOTECH event on 1<sup>st</sup> Oct 2011
- Worked as Co-Convener for Six days FDP on ‘Internet of Things’ from 11<sup>th</sup> -16<sup>th</sup> July 2016

- Worked as Convener for one-week STTP on ‘VLSI Frontend Design’ from 13<sup>th</sup> - 17<sup>th</sup> Oct, 2014
- Worked as Coordinator for Two Days Workshop on ‘Programmable System on Chip’ from 7<sup>th</sup> -8<sup>th</sup> April 2015
- Worked as Organizing member of Faculty Induction Training Programme from 3<sup>rd</sup> - 8<sup>th</sup> July 2006
- Worked as Convener for one week Workshop on ‘Design and Implementation of Advanced Embedded System’ from 30<sup>th</sup> - 4<sup>th</sup> July 2014
- Worked as coordinator for Webinar on “Role of Electronics Engineer in Building India: Post COVID-19” on 5/6/20
- Organised Seminar for TY students on Opportunities in Electric Vehicle in Sept 2022

### **Session Chair**

- Worked as Session Co-chair for 1<sup>st</sup> International Conference on Digital Signal and Image Processing on 7<sup>th</sup> and 8<sup>th</sup> March 2017
- Worked as Session Coordinator for “IEEE Applied Electromagnetics Conference -2017” on 19<sup>th</sup> -22<sup>nd</sup> December 2017

### **Reviewer/ Editor**

- Contributed as a Reviewer in the 3<sup>rd</sup> International Conference on Machine Intelligence & Smart Systems (MISS-2K23) organised by ShriRam Institute of Information Technology, Banmore, M.P. and school of Information Technology, RGPV, Bhopal, M.P.
- Contributed as a Reviewer for IEEE international Conference on Applied Intelligence and Sustainable Computing (ICAISC-2023) organized by Shri Dharmasthala Manjunatheshwara College of Engg. and Technology, Dharwad.
- Contributing as a Reviewer for
  - i) Journal of Embedded Systems and Processing

- ii) Journal of Electronics and Communication
- iii) Journal of Analog and Digital Communication

- Contributing as Editor for IIP Series book title Futuristic trends in Social Sciences
- Contributing as Editor for IIP Series book title Futuristic trends in Artificial Intelligence

### **Invited talks delivered**

- Worked as Recourse person for delivering a lecture on ‘Microcontroller Fundamentals’ for workshop on Embedded System at Amrutvahini college of Engineering on 14<sup>th</sup> September 2009
- Delivered a lecture talk on ‘Role of Electronics in Industry’ at MGM’S Polytechnic, Aurangabad on 12/7/2013
- Delivered an Expert Lecture on ‘Embedded Systems’ at Ambarwadikar Institute of Technology, Aurangabad on 23/2/2013
- Delivered an expert lecture on ‘Application of Microcontrollers in Electrical Engineering’ at Marathwada Institute of Technology, (Polytechnic) Aurangabad on 2/10/2013
- Worked as Recourse person for introductory one day workshop for TE & ME revised syllabus of subject “Advanced Processors and Microcontroller” at Savitribai Phule Women’s Engineering College on 11/10/2013
- Delivered an expert lecture on ‘Basic Electronics’ at Marathwada Institute of Technology, (Polytechnic) Aurangabad on 10/10/2015
- Worked as Recourse person for introductory one day workshop for BE/ B.Tech revised syllabus of subject “Advanced Embedded System Design” at Maharashtra Institute of Technology, Aurangabad on 13/7/2019
- Worked as Resource person for Ph.D Course work 2021of Dr. BAM University Aurangabad on 1/7/21-2/7/21
- Conducted Crash Course for Second Year Electrical Engineering Diploma students of Marathwada Institute of Technology, Aurangabad, from 11/4/22-16/4/22 for the subject Digital Electronics and Microcontroller Applications

- Conducted a 32 Hrs. Value Added Course on Development of MPPT Based Solar Power Boost Converter in MATLAB Simulink, in Maharashtra Institute of Technology, Aurangabad, from 3<sup>rd</sup> June to 26<sup>th</sup> June 2022.
- Conducted 2 days workshop on “Getting Started with MATLAB Simulink” in Maharashtra Institute of Technology, Aurangabad, from 2<sup>nd</sup> Dec to 3<sup>rd</sup> Dec 2022.
- Conducted an Expert Lecture on Microcontroller Applications for Second year Students of MIT Polytechnic Aurangabad on 12/4/2023.

### **Projects, Research Grants and Consultancy**

- Guided an Industry research project “Enhance Productivity and Accuracy of Inspection system for seat pipe” of Jyotiba Technologies Pvt. Ltd sponsored by GIZ –MASSIA, Aurangabad for 2019-20
- Guiding an industry research project “Machine Automation- Finger Print Authentication, Machine Down time and Up time calculation with its error identification, and Report generation for errors and production”, of Sangram Auto Pvt. Ltd. sponsored The Henrich Herts Schule, Germany, TATA Technologies CSR Program “Ready Engineers”, MASSIA and Maharashtra Institute of Technology, Aurangabad 2021-22

### **List of Research Publications**

#### **Papers in National/ International Journal**

1. Mr. Nikhil Shimpi, Mrs. Prof. S. P. Kodgire, Methodology on semiconductor Technology based Dual Modulus Prescaler, Special issue of International Journal of Electronics & Soft Computing & Engineering, ISSN:2277-9477
2. Mrs. Prof. S. P. Kodgire, Dr. U. D. Shiurkar, Review on Different Techniques of Designing of Low Power Digital Circuits, International Journal of Advances in Management, Technology & Engg. Sciences Engineering, ISSN:2249-7455

3. Mr. Nikhil Shimpi, Mrs. Prof. S. P. Kodgire, A Low Power Dual Modulus Prescaler, Atlantis Press, France
4. Mr. Sandeep R. Gadekar, Mrs. Prof. S. P. Kodgire, LIN PROTOCOL- Emerging Trend in Automotive Electronics, International Journal of Advances in Electronics and Electric Engineer, Vol 3, No.5 2013
5. Mr. Sachin Ashok. Waghmare, Mrs. Prof. S. P. Kodgire, A Digital Pen Based on Accelerometer for Handwritten Digit, International Journal of Engineering Sciences and Research Technology, Aug 2014
6. Mr. Sachin Ashok Waghmare, Mrs. Prof. S. P. Kodgire, Survey of an Accelerometer based Digital Pen for Handwritten Digit and Gesture Recognition, Asian Journal of Engineering and Technology Innovation, March 2014
7. Mrs. Prof. S. P. Kodgire, Ms. Anju Mohan, Automatic Fingerprint Recognition Systems: A Review, International Journal of Electronics, Communication & Soft Computing Science and Engineering, 2014
8. Ms. Anju Mohan, Mrs. Prof. S. P. Kodgire, Touch less Fingerprint Recognition using MATLAB, International Journal of Innovation and Scientific Research, Oct-2014
9. Mrs. Prof. S. P. Kodgire, Dr. U. D. Shiurkar, Improvement in Latency through the use of common buffer pool in routing node of 2D Mesh NoC, International Journal of VLSI and Embedded Systems-IJVES, Nov-2014
10. Mrs. Prof. S. P. Kodgire, Dr. U. D. Shiurkar, An Analytical Router Model for Networks-On-Chip, IOSR Journal of VLSI and Signal Processing Jul-Aug 2015
11. Mr. Devarsh Bharambe, Mrs. Prof. S. P. Kodgire, PSoC Based Isolated Speech Recognition System for Voice Controlled Appliances, International Journal of Advanced Research in Compute Engineering & Technology, Nov-2015
12. Mrs. Prof. S. P. Kodgire, Dr. U. D. Shiurkar, Synchronous FIFO Buffer model design for Network on Chip, International Journal of Innovations in Engineering and Technology, Feb 2016
13. Mr. Devarsh Bharambe, Mrs. Prof. S. P. Kodgire, Speech recognition System for Controlled Devices, International Journal of Latest trends in Engineering and Technology, Jan. 2016
14. Ms. Pranjali S. Kelgaonkar, Prof. S. P. Kodgire, Pipelined 32-bit RISC MIPS Processor on Spartan 6 FPGA, International Journal of Science, Engineering and Technology Research, Aug 2016
15. Pranjali S. Kelgaonkar, Mrs. Prof. S. P. Kodgire, Implementation of 32-bit RISC



- Processor on Spartan 6 FPGA, International Journal of Engineering and Management Research, Aug. 2016
16. Mrs. Prof. S. P. Kodgire, Dr. U. D. Shiurkar, Implementation and Performance of FIFO Buffer Design of NoC Routers, International Journal of Research in Applied Science and Engineering Technology, June-2017
  17. Panchshila P Wakode, Shilpa Kodgire, Dental Diseases Detection System using Ph Saliva- A Review, International Journal of Engineering Applied Sciences and Technology, 2018, Vol. 3, Issue 6, ISSI No. 2455-2143, Pages 1-8
  18. Shaikh Abu Talib, Shilpa P. Kodgire, Mazar Khan, Power and Congestion Control Analysis for MANET in NS3, Journal of Microwave Engineering and Technology, STM Journal 2019, Vol.6. Issue 3
  19. Shaikh Abu Talib, Shilpa P. Kodgire, Mazar Khan, Power and Congestion Control for M.A.N.E.T. using Cross Layer Design for Future Technology, Journal of Telecommunication, Switching System and Networks, STM Journal 2019, Vol.6, Issue3.
  20. Dr. Shilpa P Kodgire, Ms. K Khandagle, Priyanka Nainav, Shivprasad Gadekar, Intelligent Google Assisted Coffee Vending Machine, Journal of Embedded Systems and Processing, Vol.7 Issue 2 (May-Aug.2022)
  21. Soni Gaikwad, Dr. Shilpa Kodgire, Ms. Kiran Khandagle, A Review: IOT Based Blood Bank Maintains System, Journal of Embedded Systems and Processing, Vol.7 Issue 2 (May-Aug.2022)
  22. Shweta More, Shilpa Nandedkar, Shilpa Kodgire, A Smart Greenhouse Monitoring System, Journal of Control System and Control Instrumentation, Vol-8, Issue-2 (May-Aug 2022)
  23. Shilpa Kodgire and Et. al., Arduino based Wireless Solar Panel Cleaning Robot, Journal of Embedded Systems and Processing, Vol-8, Issue -1 (Jan-April 2023)
  24. Shilpa Kodgire and Et. al., Modeling of an Electric Vehicle with MATLAB Simulink, Journal of Advanced in Electric Devices, Vol-8, Issue -1 (Jan-April 2023)
  25. Shilpa Kodgire and Et. al., Real -Time Synchronization System for Press Machine, Journal of Control System and Control Instrumentation, Vol-8, Issue -1(Jan-April 2023)
  26. Shilpa Kodgire and Et. al., An Ideal Approach to Single Inductor Based Active Cell Balancing using MATLAB, Journal of Power Electronics and Devices, Vol-9, Issue -2 (May-August 2023)
  - 27.

28. Shilpa Kodgire and et. al., Development of Opto- Electronic Free Space Optics Rain Attenuation Mathematical Model with Optisystem for Topological Optical Link Analysis, Journal of Communications on Applied Nonlinear Analysis, ISSN: 1074-133X, Vol 30 No. 2 (2023)
29. Shilpa Kodgire and et. al., A Survey of techniques for Fault Detection in Three -Phase Transmission Lines, Journal of Digital Integrated Circuits in Electrical Devices, Vol.9, Issue-1, April 2024
29. Shilpa Kodgire and et. al., Design and Implementation of Cell Phone Jammer by Using Microcontroller, Journal of Advance Research in Analog and Digital Communication, Vol 1, Issue 1, Year 2024

### **Books/ Book Chapter**

- Communication Architecture Implementation for 2D Mesh Topology on Chip Network, Oxford Book Company, ISBN: 9789350305300
- A Text Book of Computer Architecture and Optimization, Alpha International Publication, ISBN: 978-93-5762-144-1
- Book Chapter on “Embedded AI” in the BOOK Futuristic Trends in Artificial Intelligence in IIP series, vol3, book 12, part 4, chapter 1, e- ISBN 978-93-6252-541-3

### **Copyrights**

1. Literary / Dramatic work poster on Intelligent Doormat using Piezoelectric Sensor L-91938/2020
2. Literary / Dramatic work crossword of Power Semiconductor devices L-113504/2022
3. Literary / Dramatic work Poster on Automated Irrigation System using PLC.L-117458 /2022
4. Literary / Dramatic work Poster on Active Cell Balancing Battery Management System.L-117457/2022
5. Computer Program in C language to find out Equivalent resistance and Current flowing through it. SW-15823/2022
6. Literary / Dramatic work Poster on C Program to Find out Equivalent Resistances.-L-118864/2022
7. Literary / Dramatic work Poster on Monitoring of Power Consumption Through App.L-122290/2023

8. Literary / Dramatic work Poster on Three Phase Transformer Transmission Line Fault Detection- L- 145830/2024

### **Papers in National /International Conference Proceedings**

1. Ms. S.A. Tangadpalliwar, Prof F.I.Shaikh, Prof. J.G. Rana Microcontroller based Intensive care Warmer, National conference at Osmanabad on 25<sup>th</sup>-26<sup>th</sup> Feb.2005
2. Mr. Vinay M. Chidri, Mrs. Shilpa Deshpande, Mrs. Shilpa P. Kodgire Wireless Networking- Bluetooth, National conference at Osmanabad on 25<sup>th</sup>-26<sup>th</sup> Feb.2005
3. Mrs. Shilpa P. Kodgire, Ms. S.S. Deshpande, Mrs. S.D. Sanghai Image Compression using Laplacian & Gaussian Pyramid, National conference at MIT Aurangabad on 15<sup>th</sup>-17<sup>th</sup> Sept.2005
4. Mrs. Shilpa P. Kodgire, Ms. S.S. Deshpande, Mrs. S.D. Sanghai Data ware housing and mining, National conference at Pershvanath College of Engg. Thane
5. Mrs. Shilpa P. Kodgire, Ms. S.S. Deshpande, Mrs. S.D. Sanghai Application of Fuzzy in Medical Shoe, National conference at Parshvnath College of Engg. Thane
6. Mrs. Shilpa P. Kodgire, Ms. S.S. Deshpande, Mrs. S.D. Sanghai Energy efficient mapping & scheduling for DVS enabled embedded systems, International technical symposium at MIT Aurangabad on 15<sup>th</sup>-17<sup>th</sup> Sept.2006
7. Mrs. Shilpa P. Kodgire, Mrs. S. D. Sanghai Fuzzy Techniques in Image Processing, National conference at MIT Aurangabad on 15<sup>th</sup>-17<sup>th</sup> Sept.2007
8. Mrs. S. P. Kodgire, Ms. S. S. Deshpande, Ms. Akanksha Somani, Ms. Gauri Pandit Software Driven Embedded System Design Employing Coherency & Timing Inheritance, National conference at P.E.S. College of Engineering, Aurangabad on 28<sup>th</sup>-29<sup>th</sup> Jan.2008
9. Mrs. S.P. Kodgire, Ms. A.A. Somani, Ms. G.H. Pandit Modular Test Processor for VLSI Chip Design & High-Density PC Board, National conference at College of Engineering, Osmanabad on 21<sup>st</sup> -22<sup>nd</sup> Feb.2008
10. Shilpa Kodgire Plastics for Electronics Design, National conference on Recent Advances in Polymer at MIT Aurangabad on 17<sup>th</sup> -18<sup>th</sup> Aug. 2010
11. Nikhil Shimpi & Shilpa Kodgire Survey on semiconductor Technology based Dual Modulus Prescaler, National Level Technical Symposium TechnoFest-2013, at Late G.N. Sapkal College of Engineering, Nasik

12. Mr.Nikhil Shimpi & Shilpa Kodgire, Mr. Parag Sonawane Methodology on semiconductor Technology based Dual Modulus Prescaler, 2<sup>nd</sup> International Conference on “Recent trends in Engineering and Technology-ICRTET-2013 in Late Sau. Kantibhai Bhavarlalji Jain College of Engineering, Chandwad, Nasik
13. Anju Mohan, & Mrs. Shilpa Kodgire A Survey on Touch less Fingerprint Recognition, National Conference E-NSPIRE-2K13, at Pravara Rural Engineering College, Loni on 12<sup>th</sup> & 13<sup>th</sup> March 2013
14. Shilpa Kodgire, Dr. Ulhas Shiurkar Review on Different Techniques of Designing of Low Power Digital Circuits. 2<sup>nd</sup> International Conference on Current trends and Challenges in Management, Engineering, Computer Applications and Technology ICCTCMECAT, 2013, at Deogiri Institute of Engineering and Management Studies on 22<sup>nd</sup> -23<sup>rd</sup> March 2013
15. Nikhil R. Shimpi & Shilpa P. Kodgire A Low Power Dual Modulus Prescaler, World Conference on Advances in Communication and Control Systems CACCS-2013, at DIT, Dehradun on 5<sup>th</sup> -6<sup>th</sup> April 2013
16. Sandeep R. Gadekar & Shilpa Kodgire LIN PROTOCOL- Emerging Trend in Automotive Electronics, International Conference IRJA Pune 21<sup>st</sup> July 2013
17. Rajesh D. Kshirsagar, & Shilpa Kodgire Soft – Core Processors: A Survey, Proceedings of 3<sup>rd</sup> International Conference on Recent Trends in Engineering and Technology at Late Sau Kantabai Bhavarlalji Jain College of Engineering, Chandwad, 28<sup>th</sup> -30<sup>th</sup> March 2014 Power by Elsevier
18. Sarita Verma, Shilpa Kodgire Role of Accreditation in Enhancing quality of Technical Education, ISTE 44<sup>th</sup> Annual National Convention, at College of Engineering Trivandrum, 27<sup>th</sup> -29<sup>th</sup> November 2014
19. Swati Chungde & Shilpa Kodgire **Hot Drinks Vending Machine using Verilog HDL**, 4<sup>th</sup> International Conference on Computational Intelligence Application Sandip Institute of Technology and Research Center Nasik March 2015
20. Design of Compact ACS feed Micro strip Antenna for UWB Applications, IEEE International Conference on Applied Electromagnetics, Aurangabad 2017
21. Shilpa Kodgire, Dr. Ulhas Shiurkar, Dr. R.M. Autee, Effective and Efficient Design for 2D Mesh Network-on-Chip Router, International Conference on Inventive Computing Systems and Applications 2018, Pattaya, Thailand
22. Shilpa Kodgire et al., Threshold Public Key-Sharing Technique in Block Chain, International Conference on Artificial Intelligence, Blockchain, Computing & Security

(ICABCS2023) AT Galgotias University, Noida organized by School of Computing Science and Engg. On 24<sup>th</sup> & 25<sup>th</sup> Feb 2023.

### NPTEL / Coursera Certification

Start Date	End Date	Duration (In Weeks)	Course Name	Marks (Out of 100)	Performance
Jan 2019	Mar 2019	8 weeks	Embedded System Design with ARM,	66	Elite Certificate
Feb 2019	Mar 2019	4 weeks	Teaching and Learning in Engineering	64	Elite Certificate
July 2019	Sept 2019	8 weeks	Teaching and Learning in Engineering II	75	Elite + Silver Certificate
July 2019	Oct 2019	12 Weeks	Introduction to Internet of Things	63	Elite Certificate
Jan 2020	April 2020	12 Weeks	NBA accreditation and Teaching Learning in Engineering	94	-
May 2020	-	4 Weeks	Basics of Block Chain (Coursera) by SUNY State University of New York	-	Course Certificate
Jun 2021	-	1 Week	Advanced Google Classroom for Education (Coursera)	-	Course Certificate
19/6/23	24/6/23	1 Week	Python 3.4.3	52.50	Course Certificate
Jan-2024	Mar-2024	8 Week	EV- Vehicle Dynamics and Electric Motor Drives	55.00	Course Certificate

### Awards, Achievements and Recognition

1. Women's Achievement Award 2017 from Arya Vaishya Lions Aurangabad

2. Certificate of Recognition for the outstanding support to conduct DrishTI online contest by TI University Program,2019
3. Certificate of Appreciation for working as Mentor for NPTEL Online Certification for course Design for Internet of Things, July-Dec-2017



Date:

Sign

Place: Aurangabad