

# Curriculum Vitae



1. **Name** : Dr. Santosh A. Shinde.
2. **Present Status** : Assistant Professor.
3. **Address for Correspondence** : Department of Electronics,  
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INDIA
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4. **Permanent Address** : C-55, Teachers Quarters, Shivaji University  
Kolhapur – 416 004
5. **Educational Qualifications:** M.Sc., Ph.D.

**Ph.D. (December-2009.)**

VLSI Design, Shivaji University, Kolhapur – 416004 (INDIA)

**Thesis Title:** FPGA based Programmable ASIC for circumventing Spam Email.

**Advisor:** Prof. R. K. Kamat

**M.Sc. (65 %)**

Electronics (Communication Specialization),

Shivaji University, Kolhapur – 416004 (INDIA) . **May- 2006**

**Thesis Title:** SMS (Short Message Service) based remote device control.

**Advisor:** Prof. P.N. Vasambekar

**B.Sc. (73 %)**

Electronics (with Physics and Mathematics),

Shivaji University, Kolhapur – 416004 (INDIA). **May- 2004**

## **6. Teaching experience: 03 years (P.G.)**

**7. Research Interests:** Network Security, Multiprocessor systems, Synthesis of logic circuits, Hardware/software co-design, System On Chip and Network On Chip Design, Wireless Sensor Network.

## **7. Publications:**

<b>Journals</b>		<b>Books</b>	<b>Conferences</b>	
International	National		International	National
10	06	03	02	13

## **8. Research Project Work : Co-PI**

**Project title :** “Development, testing and prototyping of wireless sensor network for Earthquake early warning system”

**Funding Agency:** UGC

**Amount:** 14.87 Lakhs

**Period:** 2012-2015

## **Publication List**

### **❖ BOOK Published :**

1. Parab, J.S., **Shinde, S.A.**, Shelake, V.G., Kamat, R.K., Naik, G.M., (2008), Practical Aspects of Embedded System Design using Microcontrollers, Springer Publications.  
<http://www.springer.com/engineering/circuits+&+systems/book/978-1-4020-8392-1>
2. Kamat, R.K., **Shinde S.A.**, Shelake, V.G., (January, 2009), Unleash the System On Chip using FPGAs and Handel C, Publications.  
<http://www.springer.com/engineering/circuits+&+systems/book/978-1-4020-9361-6>
3. Kamat, R.K. **Shinde, S.A.** and Gaikwad P.K. (2011), “Harnessing VHDL Programming with EDA Tools”, Springer Publications.  
<http://www.springer.com/engineering/circuits+%26+systems/book/978-94-007-1863-0>

❖ **JOURNAL PUBLICATIONS (IN SCI AND PEER REVIEWED JOURNALS)**

1. Guhilot, H.; Kamat, R.; **Shinde, S.A.**; , "A Monolithic Implementation of Active Inductor VLQC and Jitter Free Photon Current Detection for Bio-luminescence SPAD Sensor," [Sensors Journal, IEEE](#), VOL. 11, NO. 10, pp. 2481 - 2485, 0,doi: 10.1109/JSEN.2011.2141986. **Impact Factor: 1.52**
2. **S. A. Shinde**, and R. K. Kamat , "FPGA based Improved Hardware Implementation of Booth Wallace Multiplier using Handel C." , [ELEKTRONIKA IR ELEKTROTECHNIKA](#) , 2011. Vol - 109, No. 3, pp 71-74, ISSN 1392 – 1215. **Impact factor: 0.913**
3. **Shinde, S.A.**, Shelake V.G., Kamat, R.K., "FPGA based Packet Splitter Using Mixed Design Flow", [ELECTRONICS AND ELECTRICAL ENGINEERING](#), 2008. No. 8(88), November 2008. **Impact factor: 0.913**
4. **Shinde, S.A.**, Shelake, V.G., Kamat, R.K., "Migrating Microcontroller Based Control Systems into the Nano Fabrics Of FPGAs", (2008), Special issue on Nano Technology, [Journal of Advances in Engineering Science](#), Sect. C (1), January-March 2008, PP 7-12
5. Shelake V.G., **Shinde, S. A.**, Kamat R. K., (January 2008), Microcontroller-based setup for soil wetness measurement, Special Issue on Nano Sensors, [Sensor Review Emerald](#), Vol.28, Issue 1, 2008. **Impact factor: 0.595**
6. Kamat, R.K., **Shinde, S. A.**, Shelake, V.G., (2008), FPGA based Multiprocessor Core for Processing of Sensor Signals, [International Journal of Applied Engineering Research](#), Vol.3, No.4 (2008), pp. 487-490.
7. Shelake, V.G., **Shinde, S. A.**, Kamat, R. K., (2008), FPGA Based Multi-Tier Artificial Neural Network Processor for Firewall Implementation, [International Journal of Artificial Intelligence](#), Autumn 2008, Volume 1, Number A08, pp. 74-85.
8. Gaikwad, P.K., **Shinde, S.A.** and Kamat, R.K., Design and Realization of Soft IP Core for Pulse Oximetry Applications, [International Journal of Applied Engineering Research \(IJAER\)](#), November 2008

9. S. D. Adhatrao, V. B. Shegane, V. G. Shelake, **S. A. Shinde**, R. K. Kamat, (2008), Program Level Power Modeling of Microcontrollers, [Journal of Active and Passive Electronic Devices](#), 2008
10. Gaikwad, P.K., **Shinde, S.A.** and Kamat, R.K., “Development of Portable Data Logging System for ECG, Pulse Oximeter and Heart Rate Variability”, Allied Publishers, Proceedings of ARTCON, ISBN: 978-8424-564-6 (2010)
11. **S.A. Shinde** and R.K. Kamat and Gaikwad P. K. (2010), Implementation of FPGA based Firewall Using Behavioral Synthesis, [International Journal of Computer Science and Network Security](#), VOL.10 No.6, June 2010.
12. S.R. Patil, R.S. Bhoite, Vishal V. Patil, **S.A. Shinde** & R.K. Kamat, “FPGA based Real Time Data Acquisition System” , International Journal of VLSI Design, Vol.1 No.2 2010, pp 45-50, ISSN: 2229-3167.
13. R.K. Kamat, **S.A. Shinde** & M.D. Uplane, “FPGAs: The Prodigy of Paradigm Shifts”, [International Journal of VLSI Design](#), Vol.1 No.2 2010 , ISSN: 2229-3167.
14. Uchagaonkar Pooja A, Bekenalkar Priyanka A, **S.A. Shinde**, & R.K. Kamat, “FPGA Based Modified Level Crossing Flash Analog-To-Digital Converter”, [International Journal of VLSI Design](#), Volume : 2 Issue No. :2 (2011) Pages : 153-157
15. P. A. Uchagaonkar, **S. A. Shinde**, V.V. Patil, R.K. Kamat , “FPGA based sigma –Delta analogue to digital converter design”, [International Journal of Electronics and Computer Science Engineering](#), ISSN: 2277-1956, Vol- 1, N0- 2 pages: 508-513.
16. P. A. Uchagaonkar, **S. A. Shinde**, V. V. Patil and R.K. Kamat, “EMBEDDED WEARABLE SYSTEM FOR HYDRATION MEASUREMENT”, [International Journal of Physics and Mathematical Sciences](#) ISSN: 2277-2111 (Online), 2011 Vol. 1 (1) October-December, pp.127-131.

**❖ PAPERS PUBLISHED/ PRESENTED IN CONFERENCES**

1. Shinde S. A., Kadam P.A., FPGA based Co-Processor Design for Process Control Application, National Conference on Latest Advances, Trends in Electronic Science and Technology (LATEST—2014), Department of Electronics, Shivaji University, Kolhapur. February 14,15, 2014
2. P.A.Kadam, Tushar Gorule, S.A.Shinde, Android Front-End for Temperature Monitor, National Conference on Latest Advances, Trends in Electronic Science and Technology (LATEST—2014), Department of Electronics, Shivaji University, Kolhapur. February 14,15, 2014
3. V.V. Patil, P.A.Uchagaonkar, S. A. Shinde, R. K. Kamat, MEMs Accelerometer Based Realization of Precise Low Power Seismic Sensor, National Conference on Latest Advances, Trends in Electronic Science and Technology (LATEST—2014), Department of Electronics, Shivaji University, Kolhapur. February 14,15, 2014
4. Shinde S. A., Kadam P. A., Patil V. V., Uchgaonkar P.A. and Kamat R. K., FPGA based Soft IP core Implementation of Convolution Encoder with Viterbi Decoder for Wireless Communication, National Conference on Latest Advances, Trends in Electronic Science and Technology (LATEST—2014), Department of Electronics, Shivaji University, Kolhapur. February 14,15, 2014
5. Shinde S.A., Patil V.V., Uchagaonkar P.A. , Kamat R.K, “ Implementation Spatially and Temporally Efficient Booth Encoded Multiplier Using Compression Techniques”, National Conference on Emerging Technologies for Sustainable Development(NCET-2012), 27 and 28 December,2012.
6. Patil V.V. Uchagaonkar P.A. , Shinde S.A., Kamat R.K., “Development of Low Power Wireless Cardiac Monitoring System for Elderly People”,National Conference on Emerging Technologies for Sustainable Development(NCET-2012), 27 and 28 December,2012.
7. Patil V. V., Shinde S. A. Uchgaonkar P.A., , Gaikwad P. K., and Kamat R. K.FPGA BASED DESIGN AND IMPLEMENTATION OF LOW PASS FIR

- FILTER, National conference on Green Electronics at Brijlal Bhiyani College Amaravati, 8-9 Feb, 2013.
- 8. V.V. PATIL, P. A. UCHAGAONKAR, S. A. SHINDE AND R.K. KAMAT, MSP430 BASED SMS BASED DEVICE CONTROL SYSTEM, National conference on Green Electronics , Brijlal Bhiyani College Amaravati, 8-9 Feb, 2013.
  - 9. Patil V.V., Shinde S.A. and Kamat R.K., "Development of FPGA based Computing Platform for Web Server Applications", National Symposium on Instrumentation (NSI-35), January 7-9, 2011.
  - 10. Patil S.R., Bhoite R.S., Uchagaonkar P.A, Bekanalkar P.A, S.A. Shinde and R.K. Kamat., "FPGA based Ethernet Enabled Temperature Sensor Array, National Symposium on Instrumentation (NSI-35), January 7-9, 2011.
  - 11. Hansraj Guhilot, Shinde S.A. and Kamat R.K., "Field Programmable Analog Array(FPAA) based Reconfigurable Bio-Impedance Spectrometer", National Symposium on Instrumentation (NSI-35), January 7-9, 2011.
  - 12. P.K.Gaikwad, S.A.Shinde, R.K.Kamat (2010). Pico blaze based Flash Controller for portable Biomedical Data Loggers. Proceedings of 4th Annual Symposium On VLSI AND EMBEDDED SYSTEM SYMPOSIUM. VLSI and Embedded System, Goa.
  - 13. Gaikwad P.K. , Shinde S.A. and Kamat R.K. , "FPGA based Nano Appliances for Health Care Applications", International Conference on Nano Materials and Applications.(2009)
  - 14. Shinde S.A. and Kamat R.K., "Customized processor for instrumentation application". National Seminar on Instrumentation, Shankarrao Mahite College, Akluj, Maharashtra. (2008)
  - 15. Shinde S.A. and Kamat R.K., "Array processor: An Embedded Solution to Circumvent SPAM" U.G.C. sponsored National Seminar on "emerging Trends and Developments in Embedded Systems", D.M.S. Bandekar College, Goa, March 13-14, 2007