



Dr. Sapna Prabhu

Professor, Head of Department

(Electronics and Computer Science)

PhD (Technology) in Electronics Engineering

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AREAS OF INTEREST : Computer Architecture, Embedded Systems, Biomedical Electronics, Internet of things

PROFESSIONAL BACKGROUND

December 1992- March 2000	Fr. CRCE	Lecturer
April 2000- February 2004	Fr. CRCE	Lecturer (Senior Scale)
March 2004- March 2011	Fr. CRCE	Assistant Professor
April 2011- June 2018	Fr. CRCE	Associate Professor
July 2018-Till date	Fr. CRCE	Professor

EDUCATIONAL DETAILS

BE (Electronics)	Specialization- Advanced Microprocessors, Digital Design
	Mumbai/ Fr. CRCE 1992
ME(Electronics)	Specialization- Bio-medical Instrumentation
	Mumbai/ VJTI 2000
PhD (Electronics)	Specialization- Computer Architecture
	Mumbai/VJTI 2017

ADMINISTRATIVE BACKGROUND :

1. Head of Department (Electronics and Computer Science): From June 2019
2. Dean (Academics) : June 2016-till date
3. Program Co-ordinator (Department of Electronics for NBA): January 2016-May 2019
4. Member of Internal Quality Assessment Cell (IQAC, Fr. CRCE): January 2017 till date
5. Chairperson (Alumni Association, Fr. CRCE): Year 1995- till date
6. Convener (Time-table Committee, Fr. CRCE)
7. Member of Unfair Means Committee, Fr. CRCE
8. Co-ordinator(Women 's Development Cell, Fr. CRCE):2013 Onwards till date
9. Secretary Fr. Agnel ISTE Chapter : 2008-2014
10. Cultural In -Charge: 2009-2010
11. Debate In -Charge: 2015-16

PUBLICATIONS:

1. Sapna Prabhu, Rohin Daruwala, " Shared-resource management in multi-core systems using LV Competition model ", Int. J. High Performance Computing and Networking, Vol. 9, No. 3, 2016, Pgs .206-217.
2. Prabhu. S, Daruwala, R., "Measuring Performance Degradation in Multi-core Processors due to Shared Resources", International Journal of Engineering Research and Applications (IJERA), Issue 1, March 2013 .
3. Prabhu. S, Daruwala, R., "Methods for Cache Contention analysis in Multi-core processors :A Survey ", International Conference and Workshop on Emerging Trends in Technology , ICWET 2012, TCET , Mumbai, 24-25 February, 2012,ISBN No. 973-93-80864-47, Pgs. 63-67.
4. Prabhu. S, Daruwala, R., "Performance Variability of SPECCPU 2006 programs in Multi-core systems", [India Conference \(INDICON\), 2013 Annual IEEE](#), IITB, 13-15 December 2013, ISBN No. 978-1-4799-2274-1, Pgs. 1-6.
5. Prabhu S, Daruwala, R, Workload Characterization for Shared-Resource Management in Multi-core systems", Proceedings of International Conference in Computing, Communications and Informatics ,ICACCI 2014, September 24-27, 2014, ISBN No. 978-1-4799-3078-4, Pgs.607-612.
6. Prabhu. S, Daruwala, R.D, "Improving the scalability of shared-cache multi-core systems", India Conference (INDICON),2014 Annual IEEE,YASHADA,12-14 December,2014, ISBN No. 978-1-4799-5362-2, Pgs.1-6.
7. Kailash Nair, Manoah Jeyaraj, Dr. Sapna Prabhu and Noel James, " Smart User Authentication using Keystroke Dynamics", International Journal of Advanced and Innovative Research
8. Aparna Vishwanath, Ramesh Vulavala, Sapna U. Prabhu , "Task Scheduling in Homogeneous Multiprocessor Multi-Network Systems using Evolutionary Techniques", International Journal of Engineering Research & Technology, Vol. 3 - Issue 10 (October - 2014), e-ISSN: 2278-0181, Pgs.632-636.
9. Parshvi Shah, Sapna Prabhu, "Hybrid Learning-Based Branch Predictor ",International Journal of Engineering Research & Technology, Vol. 3 - Issue 8 (August - 2014), e-ISSN: 2278-0181,Pgs.1135-1140.
10. Sachin Shinde, Sapna Prabhu, "Labview Based Digital CRO For Electronic Measurement Techniques", International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622, Vol. 3, Issue 1, January -February 2013, pp.693-698.
11. Nibha Desai , Deepak V. Bhoir, Sapna Prabhu, "Simulation and Implementation of Electronic Cochlea", International Conference in Advances in Computing, Communication and Control,Volume 361 of the series [Communications in Computer and Information Science](#) ,Pgs. 558-569.
12. Mitali R. Ambekar, Sapna Prabhu," A Novel Algorithm to Obtain Respiratory Rate from the PPG Signal ",International Journal of Computer Applications (0975 –8887)Volume 126 – No.15,September 2015, Pgs. 9-12.
13. Sangeeta P,D.V.Bhoir, Sapna Prabhu, " Leakage Power Reduction using Multi -Threshold Voltage CMOS Technique", International Journal of Scientific and Engineering Research (IJSER), Volume 4, Issue10, October 2013

14. A Chaudhari, S Prabhu, R Pinto, "Frequency estimator to improve short range accuracy in FMCW Radar", *Advances in Computing, Communications and Informatics (ICACCI)*, 10-13 Aug. 2015, Pgs. 640-644.
15. Meghna Punjabi, Sapna Prabhu, "An ANN- based detection of obstructive sleep apnea from simultaneous ECG and SpO2 recordings", International Conference on ISMAC in Computational Vision and Bio-Engineering (ISMAC - CVB 2018) and Springer - Lecture Notes in Computational Vision and Biomechanics, May 2018
16. Nagdeote S. and Prabhu S., "Hybrid UNet Architecture based on Residual Learning of Fundus Images for Retinal Vessel Segmentation", in *Journal of Physics Conference Series*, 2021, vol. 2070, doi:10.1088/1742-6596/2070/1/012104.
17. Sumanto Kar, Scriptu J Rajan, Sebastian Dmello and Sapna Prabhu. Improving the Performance in Sentiment Analysis. *International Journal of Computer Applications* 183(7):19-24, June 2021.
18. A. Xavier, V. R. Basker and S. Prabhu, "Unknown Terrain modelling using 3D mapping," *2021 5th International Conference on Computing Methodologies and Communication (ICCMC)*, 2021, pp. 761-765, doi: 10.1109/ICCMC51019.2021.9418346.
19. F. Mendonca, R. Manihar, A. Pal and S. U. Prabhu, "Intelligent Cardiovascular Disease Risk Estimation Prediction System," *2019 International Conference on Advances in Computing, Communication and Control (ICAC3)*, 2019, pp. 1-6, doi: 10.1109/ICAC347590.2019.9036738.
20. J. A. Baikerikar, S. K. Surve and S. U. Prabhu, "Comparison of Load Balancing Algorithms in a Grid," *2010 International Conference on Data Storage and Data Engineering*, 2010, pp. 20-23, doi: 10.1109/DSDE.2010.13.
21. Baikerikar, J., Surve, S., & Prabhu, S. (2011, January) ,Consensus based dynamic load balancing for a network of heterogeneous workstations. In *International Conference on Advances in Computing, Communication and Control* (pp. 116-124). Springer, Berlin, Heidelberg.
22. Baikerikar, J., Surve, S., & Prabhu, S., "Graph Partitioning for a Network of Heterogeneous Workstations ", *2010 International Conference on Advances in Communication, Network, and Computing*, pp. . 240-244, DOI 10.1109/CNC.2010.64

TRAINING PROGRAMS CONDUCTED :

1. Co-ordinator of Faculty Development Program (2 days) on "Neural Networks", 2011-2012
2. Co-ordinator of Faculty Development Program (1 day) on "ARM MBED platform", 2013-14

PARTICIPATION IN TRAINING PROGRAMS :

1. "Object -Oriented Modelling and Design with UML", 19th November 2001- 30th November 2001, ITW, SNDDT, ISTE-STTP (Two weeks)

2. "Networking: Theory to Practice", June 9-20, 2003 , Fr. CRCE (Bandra), ISTE-STTP (Two weeks)
3. "Advanced Microcontrollers and Embedded Systems ", January 19-24, 2004, Vidyavardhini's College of Engineering and Technology, Vasai, ISTE-STTP (One week)
4. "VLSI and Embedded Systems", June 12-16, 2006, Fr. CRCE (Bandra), ISTE-STTP (One week)
5. "Introduction to Project Management", January 9-13, 2012, Fr.CRCE, ISTE-STTP (One week)
6. "Research Methodology" conducted by IITB at VJTI (Mumbai), ISTE-STTP (One week)
7. "FPGA Design" at IIT (Bombay) on September 30-October 1,2003 in association with CG-CoreEL Programmable Solutions Pvt. Ltd.
8. National Conference on Bio-Medical Engineering (NCBME-2006) on March 28-29,2006 held at Sardar Patel Institute of Technology(SPIT)
9. Workshop on "Orientation on Embedded systems" conducted by the ISTE Chapter of Don Bosco Institute of Technology on October 4, 2005
10. Seminar on "Recent developments in Bio-Medical Instrumentation" on August 31-September 1, 2007 Fr. CRCE(Bandra)
11. One-day Seminar on "VLSI" dated April 19,2002 at Fr. CRCE
12. Seminar on "Research Career: Success and Survival tips" at Fr. CRCE

INTERACTION WITH OUTSIDE WORLD :

1. Program Co-ordinator for Electronics and Computer Science Branch (University of Mumbai)
2. Member of PG Syllabus Committee
3. Member of Department Advisory Board (DAB) at Shah and Anchor Kutchi Engineering College (SAKEC)
4. Academic Auditor for EXTC Department (D J Sanghvi College of Engineering): 2016-17
5. Reviewed paper for Elsevier Journal "Microprocessors and Microsystems"
6. Reviewer for various Conferences and books
7. Resource person at SAKEC in one-week STTP on "Internet-of-Things and its applications): 2016-17
8. Resource person at Student training program at Xavier Institute of Engineering

PROFESSIONAL AFFILIATIONS : ISTE Life Member (LM 24031)