FACULTY PROFILE

NAME	: Dr. Sapna Prabhu
DESIGNATION	:Professor
QUALIFICATION	: PhD (Technology)in Electronics Engineering
EMAIL	:sapna@frcrce.ac.in
AREAS OF INTEREST	: Computer Architecture, Embedded Systems, Biomedical Electronics

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 :

Head of Department (Electronics and Computer Science): From June 2019

Dean (Academics)   : June 2016-till date

o Program Co-ordinator (Department of Electronics for NBA): January 2016- May 2019
o Member of Internal Quality Assessment Cell (IQAC, Fr. CRCE): January 2017- May 2019

- o Chairperson (Alumni Association, Fr. CRCE): Year 1995- till date
- o Convener (Time-table Committee,Fr. CRCE)
- o Member of Unfair Means Committee,Fr. CRCE
- o Co-ordinator(Women 's Development Cell, Fr. CRCE):2013 Onwards till date
- o Secretary Fr. Agnel ISTE Chapter : 2008-2014
- o Cultural In -Charge: 2009-2010
- o Debate In -Charge: 2015-16

Ph.D. SUPERVISED   :One (Registered)

RESEARCH GRANT PROJECTS/PATENTS   : Caretaker Robot for the Elderly(2016-17)
Minor   Research Grant

PUBLICATIONS:

- o Sapna Prabhu, RohinDaruwala," 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.

- o 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 .

- o 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.
- o 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.

- o 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.
- o 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.

- 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.

- 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.
- 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.
- 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.
- 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.

- 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
- 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.
- 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

BOOKS AUTHORED   : Nil

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, SNDT, 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   :

Member of PG Syllabus Committee

Academic Auditor for EXTC Department (D J Sanghvi College of Engineering): 2016-17

Reviewed paper for Elsevier Journal " Microprocessors and Microsystems"

Reviewed paper for ICACCI conference(poster)

Reviewed book manuscript for PENRAM publishing

Resource person at SAKEC in one-week STTP on" Internet-of-Things and its applications): 2016-17

PROFESSIONAL AFFILIATIONS   : ISTE Life Member (LM 24031)