

# FACULTY PROFILE

**Santosh Chapaneri** (santoshchapaneri@sfitengg.org)

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Assistant Professor

Department of Electronics and Telecommunication Engineering

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❖ Date of Joining the Institute : **01/06/2011**

❖ Education :

1. M.S. Electrical and Computer Engineering (Signal Processing)  
University of Arizona, USA, 2008  
Thesis Title: Content-Adaptive H.264/AVC Video Error Concealment
2. B.E. Electronics and Telecommunications  
University of Mumbai, 2001  
Project: Automatic Data Logger

❖ Total Experience in Years : **17 Years**

**A. Teaching : 12 Years**

**B. Industry : 5 Years**

- Software Developer, Microsoft Corp. USA, 2008-2011
- R&D DSP Engineer, iGate (Patni), India, 2001-2003

❖ Courses Taught:

- Statistical Signal Processing (PG)
- Modern Digital Communication (PG)
- Statistical Signal Analysis (PG)
- Network Security (PG)
- Data Compression and Encryption (UG)
- Digital Signal Processing (UG)
- Digital Communication (UG)
- Random Signal Analysis (UG)
- Filter Theory (UG)
- Optical Fiber Communication (UG)

❖ Skill Sets:

- Multimedia: JPEG, JPEG2000, MPEG-2, MPEG-4, H.264/AVC
- Programming: C, C++, COM, ATL, WTL, MFC, VC++, WIX, XML, Win32, OS Multi-threading
- Networking: TCP/UDP/IP, RTP, WLAN, Sensor networks, Bluetooth, Manets, Network Security
- Tools: NS-2, WinDbg, XPerf, MATLAB, LaTeX, Adobe Photoshop, Flash, XnView, PSpice, CVS, SVN, YUV-Video, VCTool, VQM, Voicebox, Audacity

- ❖ Research Advisor in field of
  - Electronics and Telecommunication, Computer Engineering

- ❖ Active Research in
  - Music Information Retrieval (MIR)
  - Automatic Speech Recognition (ASR)
  - Speech Emotion Recognition (SER)
  - Image Splicing
  - Image Saliency
  - Image Encryption
  - Video Error Concealment
  - Error Control Coding

- ❖ Publication & Conferences : **25**  
(Google Scholar – 53 citations, h-index 3)

**a. Conference**

National : **03**  
International : **14**

**b. Journal**

National : **00**  
International : **08**

- ❖ Awards :

- *Ship-It* Software Developer award from Microsoft Corporation, USA, 2010
- Special Honors Merit Certificate from University of Mumbai, 2001
- Stood 1<sup>st</sup> in B.E. EXTC, 2001 at University level
- Graduate Scholarship from Narottam Sekhsaria Foundation, 2005-2008
- Graduate Research Scholarship from University of Arizona, 2006-2008
- Level – 2 Certified Tutor, USA, 2007-2008
- JRD Tata Scholarship for FE, SE, TE, BE from 1997 to 2001

- ❖ Professional Memberships : IEEE, IEEE Signal Processing Society, ISTE, ISMIR

- ❖ Service to Professional Bodies:

- **Reviewer IET Transactions on Image Processing**
- IEEE Bombay Section: Counselor for IEEE- SFIT Student Branch (2011-13)

- ❖ Projects Guided :

- M.E. Projects: **10**
- B.E. Projects: **23**

- ❖ Academic Duties:

- Chair, Review Committee, CSCITA 2017 (SFIT)

- B.E. Project Coordinator (2011 – present)
- Aakash Coordinator, IIT-Bombay & SFIT (2012-2014)
- IEEE Student Branch Coordinator, SFIT (2011-2013)
- E-Cell Faculty Member (2011 – present)

❖ **Interaction with Professional Institutions :**

- Reviewer for IET Transactions on Image Processing
- University of Mumbai – Examiner, Moderator
- MPSTME NMIMS University – Examiner, Moderator
- Review Chair for IEEE International Conference CSCITA 2014, SFIT
- Review Chair for IEEE International Conference CSCITA 2017, SFIT

❖ **R&D Activities:**

**A. Workshop, lecture series & Conferences Conducted:**

- R&D lecture series, SFIT (2011 – ongoing)
- Clicker Usage on Aakash Tablets, workshop conducted by IIT-Bombay, Jul 2013
- Aakash for Education, ISTE approved workshop conducted by IIT-Bombay, Nov 2012
- 3D Game Development Workshop, conducted by AbleBrain, a venture of IIT-Bombay, Oct 2012
- Industrial Visit to 98.3 FM Radio Mirchi, Lower Parel, Oct 2012
- Blood Donation Camp, MGM Blood Bank, Oct 2012
- Simulink, conducted by SFIT Faculty, February 2012
- Ethical Hacking, conducted by Kyrion Digital Securities Ltd., Mar 2012
- Matlab: From Basics to Advanced, Thakur College of Engineering and Technology, Apr 2004

**B. Invited Talks**

- Learning Pedagogy Tools, Faculty Development Program, SFIT, Jul 2016
- Learning Pedagogy Tools, Faculty Development Program, SFIT, Jul 2015
- Hands-on LaTeX workshop, IEEE SFIT, Mar 2015
- Image and Video Quality Assessment, IEEE SKEP Distinguished Lecture Series, SFIT, Sep 2014
- Research Methodology, SFIT, Feb 2014
- Video Compression Techniques, STTP on Image Processing, DJ Sanghvi CoE, Jan 2013
- Quality Assessment of Digital Images, STTP on Image Processing, DJ Sanghvi CoE, Jan 2013
- Pursuing Research: Why and How, Faculty Development Program, SFIT, Jul 2012 and Jul 2011
- Cryptography and Its Applications, STTP on Mathematics, SFIT, Mar 2012
- Chaos Theory and Fractal Geometry, STTP on Mathematics, SFIT, Mar 2012
- Image Quality Assessment, R & D Lecture Series, SFIT, Mar 2012
- Providing Online Access and Research Thrust for Students, SFIT Faculty, Feb 2012
- Software Engineering Excellence: Transitioning from Academic Life to Software Corporate Life, IEEE SFIT, Oct 2011

### **C. Continuing Education Programs**

- Workshop on “Predictive Analytics and Recommender Systems”, CDAC Kharghar, Mumbai, 14-16 July 2016
- Summer School on Music Science Technology and Research (MuSTeR 2016), IISc Bangalore, 9-12 May 2016
- Advances in Signal Processing and Applications, QIP workshop conducted by VJTI, Feb 2015
- Computer Vision and Pattern Recognition, QIP workshop conducted by NIT Durgapur, June 2014
- Cyber Security, ISTE approved workshop conducted by IIT-Bombay, Jun 2014
- Computer Networks, ISTE approved workshop conducted by IIT-Bombay, May 2014
- Signals and Systems, ISTE approved workshop conducted by IIT-Kharagpur, Jan 2014
- Analog Electronics, ISTE approved workshop conducted by IIT-Bombay, Jun 2013
- Research Methodologies in Technology for Education, ISTE approved workshop conducted by IIT-Bombay, Feb 2013
- Aakash for Education, ISTE approved workshop conducted by IIT-Bombay, Nov 2012
- Orientation for Aakash Coordinators, conducted by IIT-Bombay, Nov 2012
- Research Methodologies, ISTE approved STTP workshop conducted by IIT-Bombay, Jun 2012
- Simulation: From Concept to Practice, ISTE approved STTP workshop conducted by Fr. Agnel COE, Bandra, May 2012
- Measurement Techniques in Optical and RF Communication, conducted by MES College of Engg., Pune, Jan 2012
- Faculty Development Programme, ISTE approved STTP workshop conducted by St. Francis Institute of Technology, Jul 2011
- Training for WIX Development, conducted by Microsoft Corporation, Redmond, USA, Aug 2010
- Training for Software Development: C, C++, COM, conducted by Microsoft Corporation, Redmond, USA, Oct 2008
- Orientation for Software Development Engineers, conducted by Microsoft Corporation, Redmond, USA, Sep 2008
- Embedded Systems and DSP, conducted by IIT-Bombay, Oct 2004
- Signal and Image Processing, conducted by Don Bosco Institute of Technology, Sep 2004
- Probability and Random Processes, ISTE approved workshop conducted by Vidyavardhini’s College of Engineering, Mar 2004

Dated: 11 Jan 2017

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