

**DR. VARSHA TURKAR, Ph.D. IIT Bombay**

*Senior Member IEEE,*

Professor and Head

Dept. of Electronics and Telecommunication Engineering

Don Bosco College of Engineering,

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**Summary**

- A highly talented, dedicated, and performance-driven professional
- In-depth knowledge of domain Digital Image Processing
- Well-versed and interested in Polarimetric Synthetic Aperture Radar Image Classification, Image Processing, Data Mining
- Ability to coordinate and direct all phases of project-based efforts while managing, motivating, and leading project team initiatives
- An excellent problem solver, ability to grasp complex systems and identify opportunities for improvements and for resolution of critical issues
- Able to quickly learn new concepts and technologies
- Excellent ability in expressing ideas clearly, and team management skills

**Details of relevant experience**

Total Experience: 23 Years

Research Experience in POLSAR data processing: 12.5 Years

Teaching Experience: 15 Years 5 months

Industry Experience: 7 Years 7 Months

**Education**

- Ph.D. (2013), Centre of Studies in Resources Engineering, Indian Institute of Technology Bombay, Mumbai, India.  
Dissertation Title: “**Polarimetric Synthetic Aperture Radar Image Classification for Various Land Cover Features**” (Microwave Remote Sensing)
- M.E. (2005) (67%), Electrical Engineering (Control system), V.J.T.I. Matunga, University of Mumbai, India.
- B.E. (1994) (62%), Electronics, Thadomal Shahani Engineering College, University of Mumbai, India
- Diploma (1991) (75%), Industrial Electronics, Government Polytechnic Bandra, Mumbai, India.

## Career Path

Sr. No	Organization	Designation	Duration
1	Don Bosco College of Engineering, Margoa, Goa	Professor and Head	23 July 2018 till to date
2	Vidyalankar Institute of Technology (Dept of Information Technology)	Associate Professor and Head	1 Dec 2017 to 30 June 2018
3	Vidyalankar Institute of Technology (Dept of Electronics)	Associate Professor	24 July 2014 to 30 Nov. 2017
4	Thakur College of Science & Commerce	Assistant Professor	2 Aug 2004 – 22 July 2014
5	Sparsh Management Information Consultancy	Software Engineer	1 Dec 1999 -30 April 2004
6	National Film Development Corporation	Technician	1 Sept 1995- 31 Dec 1998

## Overall responsibilities

- Courses taught
  1. Digital Image Processing
  2. Parallel Processing
  3. Software Testing
  4. Speech Recognition
  5. Data Mining
  6. Multimedia
  7. Computer Organization
  8. Fundamentals of Digital Computing
  9. Geographic Information Systems
  10. Computer Graphics
  11. Database Management System
  12. Digital Computer Fundamentals
  13. Digital System Design
  14. Operating Systems
- Chairperson, Research and Development Committee, DBCE, Goa, From August 2020
- Chair, WIE Affinity Group, and Excom member, IEEE Bombay Section from August 2020
- Head of the department of Electronics and Telecommunication Engineering, DBCE, Goa from May 2019 till date
- Member of Institute Condemnation Committee, DBCE, Goa, 2019-2020
- Vice-President of Institution's Innovation Council, DBCE, Goa, 2019-20
- President of Institution's Innovation Council, DBCE, Goa, 2018-19
- Principal Investigator for Student Satellite Club, "Parikrama", DBCE, Goa, Since 2018
- Mentor at FiiRE - Forum for Innovation Incubation Research and Entrepreneurship, DBCE Campus, Goa Since 2018
- IEEE Student Branch Advisor, DBCE, Goa Since 2018

- Member of academic review committee at DBCE from April 2019
- Senior Supervisor for the Goa University exam May/June 2019 and Nov/Dec 2019 at DBCE
- Chairperson for unfair-means committee, DBCE, Goa 2019, 2020
- Member of NAAC core committee, DBCE, Goa, from July 2019
- NBA Co-ordinator (institute), DBCE, Goa, from March 2019
- Member of IQAC committee, DBCE, from July 2019
- Member of Institute Disciplinary Action Committee (IDAC), DBCE, 2019, 2020
- Head of the Dept. of Information Technology (VIT), May to June 2018
- R and D convener of Vidyalankar Institute of Technology (VIT), July 2014 to June 2018
- Member of academic review committee at VIT for the year 2017-18
- Member of interview panel at VIT, July 2014 to June 2018
- Project coordinator for the department of Electronics (Ac Year 2016-17)
- Member of NAAC committee (Vidyalankar Institutes of Technology 2016, 2017, Dept. of Information Technology, Thakur College of Science and Commerce 2011)
- Member of NBA core committee (Dept. of Electronics, VIT), July 2014 to June 2016
- Member of Quality and Lab readiness committee (VIT) which also include implementation of Problem Based Learning, July 2014 to June 2017
- Chief Conductor of University examination at VIT (May 2016)
- Member of academic review committee for Vidyalankar School of Information Technology (July 2014- Nov. 2014)
- Member of Woman Development Cell at Thakur College of Science and Commerce (June 2006 to 2012)
- Member of Anti-ragging Committee at Thakur College of Science and Commerce (June 2013 to 2014)
- Member of Unfair-means Committee at Thakur College of Science and Commerce (June 2012 to 2014)
- Member of Cultural Committee at Thakur College of Science and Commerce (June 2005 to 2006)
- Guiding and mentoring students on academic and other matters
- Responsible for the preparation of lecture plans, learning objectives and course files and providing guidance on the same

### **Sponsored and Academic Research**

- Minor Research Proposal sponsored by **University of Mumbai**. Title: "Regression Based Crop Yield Estimation Model". Duration: 01 Year (2019-2020), Research Grant: 25000/-
- Project sponsored by **NISAR, Space Application Centre, ISRO**. Title: Development of Machine Learning Tools for Speckle Reduction and Urban Applications. Duration: 4 Years (2017-2020), Research Grant: 2600000/-
- Collaborated with Microwave Remote Sensing Lab, CSRE, IIT Bombay for continuing research

## Funding

1. Financial assistance from IIT Bombay to attend IEEE International Geoscience and Remote Sensing Symposium, Vancouver, Canada in July 2011 (Rs. 30,000/-)
2. Travel grant from IEEE Geoscience and Remote Sensing Society to attend IEEE International Geoscience and Remote Sensing Symposium, Vancouver, Canada in July 2011 (750\$)
3. Travel grant from IEEE Geoscience and Remote Sensing Society to attend Training on Soil Moisture and Agricultural Monitoring using Microwave Remote Sensing being held between 7-9<sup>th</sup> Feb 2018 at Space Applications Centre, Ahmedabad (Rs. 10,000/-)
4. Funding received of amount Rs. 19000/- from IEEE GRSS Mumbai Chapter to attend IEEE Women in Engineering International Leadership Summit Kochi 2018, held at Kochi (7 and 8 September 2018)
5. Travel grant from IEEE GRSS Mumbai Chapter to organize and attend one day event on "Women Empowering Women" at Ramrao Adik Institute of Technology, New Mumbai, on 8<sup>th</sup> March 2019 (Rs. 7000/-)
6. Travel grant from E-Yantra Lab, IIT Bombay to attend the 2 days' workshop on 5 and 6 April 2019 (Rs. 3000/-)
7. Funding received of amount Rs. 30000/- from ISRO under the research grant to travel and stay for the work related to the research project for the year 2018-19
8. Travel grant from IEEE Geoscience and Remote Sensing Society to attend IEEE International Geoscience and Remote Sensing Symposium IGARSS-2019, Yokohama, Japan in July 2019 (1660\$)

## Industrial Consultancy and Revenue Generation:

Consultant for the project related to "Product development in Augmented Reality" at Vanmat Technologies Pvt. Ltd., March 2019. Duration: 20 hrs. Total revenue generated Rs. 56286.00/-

## Achievements /Resource Person:

1. **Completed Ph.D. in Nov. 2013 from CSRE, IIT Bombay** in "Polarimetric Synthetic Aperture Radar Image Classification for Various Land Cover Features". I am perhaps one of a few world researchers who did developed expertise in using in particular the RISAT-1 data.
2. **Worked on ISRO sponsored project** on "Development of land parameter retrieval techniques and tools", (2011-2014)
3. Total number of publications are 59 out of which one in **IEEE journal (Citations: 42), others in IEEE Explorer, ACM, Springer, Elsevier and IJCA. Total No. of citations are around 165.**
4. Worked as a **Chairperson** for M. Sc. Information Technology examinations at university of Mumbai (2014)

5. **Invited by ESSAND** (Earth System Science and Andaman Natural Disaster Management), PSU, Phuket, Thailand to give a research seminar "Land Cover Classification Using Multi-frequency and Multi-polarization SAR Data" (June 29 – July 3, 2014)
6. Worked as session chair for the international conference ICCCV 2017, organized by Thakur College of Engineering and Technology (24 Feb 2017)
7. Worked as session chair for the international conference ICAC3, organized by Fr. Agnel, Bandra (1 April 2015)
8. Member of Programme committee for the international conference ICAC3, organized by Fr. Agnel, Bandra (Dec. 2019)
9. Worked as session chair for the national conference, "Advancement in IT: Current Trends, Future Scenario and Impact on Society", organized by S. M. Shetty College of Science and Commerce and Studies, Powai (23 August 2014)
10. Worked as a judge for
  1. Essay writing competition on, "Opportunities and Challenges for MSME in the state of Goa", organized by Micro, Small and Medium Enterprises (MSME) for the students of higher secondary government schools across Goa (11 Dec. 2019)
  2. Tantravihar Intercollege Project Competition, organized by Vidyalankar Institute of Technology (VIT) (2014, 2015 and 2016)
  3. Project Competition, organized by Vidyalankar Polytechnic (March 2017)
11. Worked as university nominee (subject expert) in interview panel at Hinduja College (July 2014)
12. Worked as an interview panel member for Kendriya Vidyalaya Sanghatan (22 May 2017)
13. Worked as a subject expert in interview panel at Khandwala college, Malad, Mumbai June 2018
14. Invited as a **Chief Guest and Keynote Speaker** at 25<sup>th</sup> Prestigious World Conference on Applied Science Engineering and Technology which was held on 29th and 30th December 2019, Nanutel Margao, Goa, organized by IFERP-Institute for Engineering Research and Publication. The topic of talk was "Geographic Information System and Remote Sensing Education in India, the Issues and Solutions".
15. **Resource person**
  - a. **Guest lectures**
    1. "Image Processing and its Applications", MCA, Veermata Jijabai Technological Institute, Matunga, 5 Feb 2015
    2. "Microwave remote sensing workshop-2015" organized by CSRE IIT Bombay on 23-24, Nov. 2015
    3. A webinar on "Career in Engineering" organised by training and placement office, DBCE, Goa on 26 May, 2020
    4. A webinar on "Career in Engineering" organised by training and placement office, DBCE, Goa on 8 June, 2020
    5. A webinar on "Applications of Satellite Image Processing" organised by Usha Mittal Institute of Technology, SNTD Women's University, Mumbai and IEEE GRSS Mumbai Chapter on May 8, 2020

6. A Webinar on “IEEE WIE Membership Benefits and Scope”, SMELT 2020, organised by IEEE Bombay SAC on 29 September 2020

**b. IEEE Skill and Knowledge Enhancement Program (SKEP)**

1. Vidyalkar Institute of Technology, 31 January 2015
2. Pillai Engineering College, Panvel, 1 April 2017
3. A webinar on “Satellite Image Processing” organised by IEEE Student Branch of Don Bosco College of Engineering, Goa on 27 May 2020

**c. Short Term Training Program**

1. AICTE Sponsored STTP on “Analytics Essentials and Tools in Applied Research”, 27<sup>th</sup> Nov to 8<sup>th</sup> Dec. 2017, Organized by St. Francis Institute of Technology, Borivali
2. National Workshop on “Current Facets of Botany” Theme1: Concept of Remote Sensing & GIS with special emphasis on Biodiversity & Resource Assessment: 24-30 July 2017, Organized by Indian Society of Geomatics (Vadodara Chapter), in collaboration with Department of Botany, Faculty of Science, The Maharaja Sayajirao University of Baroda, Indian Science Congress Association (Baroda Chapter), Indian Women Scientists’ Association (Baroda Branch) and IEEE Geoscience and Remote Sensing Society (Gujarat Chapter)
3. STTP on Satellite Image Processing for Remote Sensing Organized by Terna Engineering College during 2 to 6 Jan 2017
4. STTP on High Performance Computing with CUDA, MPI and Open MP Organized by Dept. Information Technology, VIT during 1 to 5 Feb 2017.
5. STTP on Innovations and Applications of Engineering Mathematics Organized by Dept. of Mathematics, VIT during 28 Nov. to 2 Dec. 2016.

**d. Faculty Development Program**

1. Effective Technical Paper Writing for the teaching faculty of Don Bosco College of Engineering, Organized by Training and Placement Cell of DBCE, on Friday, 30 November 2018
2. GIS using QGIS for the faculty members of various colleges affiliated to the university of Mumbai January 2014
3. Practical: Hands on for Data Mining Course (Msc IT-Part-I) using R/Weka at S.K. Somaiya College, Vidyavihar, August 2013
4. Practical: Hands on for Parallel Processing Course (Msc IT-Part-II) using Linux August 2005 at Vaze Kelkar College, Mulund
5. Practical: Hands on for Multimedia Course (Msc IT-Part-II) using JAVA August 2005 at Vaze Kelkar College, Mulund
6. Practical: Hands on for Digital Image Processing Course (Msc IT-Part-I) using Matlab/C September 2004
7. Practical: Hands on for Speech Recognition Course (Msc IT-Part-I) using Matlab February 2004

**15. Organized STTPs/Workshops/FDPs/Conferences/Symposiums**

1. International conference (ICRTITCS-11) at Thakur College of Science and Commerce (member of organizing committee)

2. International conference (ICRTITCS-12) at Thakur College of Science and Commerce (member of organizing committee)
3. National Symposium RACEM-2015 at VIT (member of organizing committee)
4. International Conference RACEM-2016 at VIT (Co-Chair)
5. Second National Symposium RACEM-2017 at VIT (General-Chair)
6. Outreach Program of IEEE GRSS Bombay Chapter held at VMCC, IITB on 8, 9 June 2017 (member of organizing committee)
7. ISTE Approved STTP on Use of Open Source Software in Research during 27 June to 1 July 2016 (Convener) at Vidyalkar Institute of Technology, Wadala, Mumbai
8. Innovations and Applications of Engineering Mathematics during 28 Nov. to 2 Dec. 2016 (Organizing committee member) at Vidyalkar Institute of Technology, Wadala, Mumbai
9. ISTE Approved one-week STTP on Innovative Teaching Tools and Methodologies for Engineering Faculty during 19 June to 23 June 2017 (Convener) at Vidyalkar Institute of Technology, Wadala, Mumbai
10. ISTE Approved one-week STTP on STTP on Open Data Science with IOT during 25 June to 30 June 2018 (Advisor)
11. 1-day Faculty Development Program on "ARM Cortex" at Don Bosco College of Engineering, Fatorda, Goa, on 29 Sept. 2018
12. A FDP (Faculty Development Programme) on Cognitive Skills, Design and Critical Thinking for the teaching faculties of Don Bosco College of Engineering on Friday, 29 December 2018 at the Institute
13. A FDP on Ideation and IPR (Intellectual Property Rights) for the teaching faculties of Don Bosco College of Engineering on 06 Dec. 2018
14. Two days IEEE Skill and Knowledge Enhancement Program at Don Bosco College of Engineering, Fatorda, Goa, on 1 and 2 Feb. 2019
15. Convener of 2 days' workshop on "Introduction to Robotics", Hosted for e-Yantra, IIT Bombay on 11 and 12 January 2019
16. Certified (training) course on "Embedded Systems & IOT" (Eduvance, Mumbai) for Third Year and Final Year students from 2 to 12 January 2019
17. Three days hands on workshop on, "Drone Design and Aviation", in collaboration with Eduvance and Drona Aviation from 7 February to 9 February 2020
18. A two days hands-on workshop under IETE, on "Node JS", for the T.E ETC student, on 28 and 29 February 2019
19. A two days hands-on workshop under IETE, on "Analog IC Design", for the T.E ETC student (50%), on 13 and 14 March 2019
20. A two days hands-on workshop on, "Digital VLSI Design", for the T.E ETC student (50%), on 13 and 14 March 2019
21. Workshop on "Introduction to Python Programming", for FE Students on 28-29 Feb and 13-14 March 2020

22. Four days online workshop on, "Aerial Robotics: Designing for Beginners", in association with InfiCorridor Solutions Pvt. Ltd. from 16 June to 19 June 2020
23. A one day event on "Women Empowering Women", at Ramrao Adik Institute of Technology, New Mumbai, on 8th March 2019 (Convener)
24. A one week online ISTE approved Faculty Development Programme (FDP) on "Recent Trends in RF and Microelectronics", in collaboration with National Institute of Technology, Goa from August 31- September 4, 2020 (Convener)
25. A 5 day online short term training programme titled "5G Wireless Communication and Antenna Design using MATLAB and Simulink" was organized on 11th, 12th, 17th, 18th and 25th August 2020 (Convener)
26. International InGRASS-2020, Ahmedabad, India on 2 to 5 Dec. 2020 organized by IEEE Geoscience and Remote Sensing Society (Member of organizing committee: WIE Chair)

#### **16. Organized Industry Visits**

1. Dahanu Thermal Plant on 8 July 2016 (for Faculty Members)
2. UXO India on 9 Sept. 2016 (for Faculty Members)
3. ISRO, HAL and PES, Bangalore from 7 to 11 February 2019 for IEEE Student Branch, DBCE (66 Students and 4 faculty members)
4. Eklahare thermal power plant, Nashik, 1 to 4 March 2020 for IEEE Student Branch, DBCE (66 Students and 4 faculty members)

#### **17. Activities as a Chair. IEEE WIE Affinity Group Bombay Section**

1. A webinar on Motivational Talk, "Lead the life", Speaker: Dr. Celia Shahnaz, Chair of IEEE Bangladesh, 7 August 2020
2. A webinar on, "Mental awareness for General Well Being", Speaker: Prema Sankar, Leading FET Practitioner and Coach, 21 August 2020 in collaboration with IEEE WIE Kerala and Gujrat Section
3. A webinar on Woman Empowerment, "I made it possible", Speaker: Anima-Patil Sabale, Software and Aerospace engineer, NASA, 5 September 2020
4. A Webinar on, "I Engineered My Life", Speaker: Dr. Padmaja Joshi, Senior Director, C-DAC, 3 October 2020
5. A Webinar on Engineering the future for 9<sup>th</sup> and 10<sup>th</sup> Std. students, "Advancing the World for Your Desire!", 3 October 2020
6. A Webinar on, "Early Detection and Prevention of Gynaecological Cancers", Speaker: Dr. Vaishali Bhalerao, Melbourne, Australia, 17 October 2020

18. Paper setter for PhD Entrance Test (PET) for Information Technology 2015-16 at University of Mumbai

19. Paper setter and Moderator for M.E EXTC programme 2016, 2017, 2018, M.Sc. from 2004 to 2014 at University of Mumbai

20. Paper setter for B.E ETC/ECE programme 2019 at University of Goa

21. **Member of syllabus committee** (University of **Goa**) for B.E. (ETC/ECE) 2019-20, RC(2019-20)

- a. Digital Image Processing (T.E. ETC/ECE) 2019
- b. Machine Learning (B.E. ETC/ECE) 2019
- c. High Performance Computer Architecture (B.E. ETC/ECE) 2019



22. **Member of syllabus committee** (University of **Mumbai**) for B.Sc., M.Sc. IT., B.E. and ME EXTC. Set the syllabus for the following courses
- a. OOPS using JAVA (B.E EXTC) 2017
  - b. DBMS (T.E. EXTC) 2018
  - c. Image Processing using Machine Learning (ME EXTC) 2016
  - d. Remote Sensing (ME EXTC) 2016
  - e. Fundamentals of Digital Computing (FY B.Sc. IT) 2011
  - f. Multimedia (SY B.Sc. IT) 2012
  - g. GIS (TY B.Sc. IT) 2013
  - h. Image Processing (M.Sc. IT Part-II) 2014
  - i. Introduction to Embedded System (M.Sc. IT Part-I) 2014
  - j. Real Time Embedded System (M.Sc. IT Part-II) 2014
  - k. Design of Embedded Control System (M.Sc. IT Part-II) 2014
  - l. Advanced Image Processing (M.Sc. IT Part-II) 2014
  - m. **Set the practical** at university level (provided the resource material to the faculty members from the various colleges: **Lab material is developed**)
    - i. Multimedia (M.Sc. IT-II) (2005)
    - ii. Speech Recognition (M.Sc. IT-I) (2004)
    - iii. Parallel Computing (M.Sc. IT-II) (2005)
    - iv. GIS (TY B.Sc. IT) (2014)
    - v. Image Processing (M.Sc. IT Part-II) (2014)
    - vi. Advanced Image Processing (M.Sc. IT Part-II) (2014)
    - vii. Data Mining (M.Sc. IT-I) (2013)

23. **Registered as a PhD supervisor** at PACIFIC university Udaipur and AMET Chennai

24. **Reviewer:**

International Journals:

1. Geocarto International
2. IEEE JSTAR
3. IETE Technical Review (Taylor and Francis)
4. Journal of Applied Remote Sensing (JARS)
5. International journal of recent development in engineering and technology (IJRDET)
6. Public Science Framework
7. Springerplus
8. International Journal of Innovative research in advanced engineering (IJIRAE)
9. Journal of Remote Sensing Technology, Bowen Publishing Co., Ltd (JRST)
10. International Journal of Remote Sensing Applications (IJRSA)
11. International Journal of Emerging Technology and Advanced Engineering
12. Scientific Online
13. Asian Journal of Geoinformatics

#### 14. Journal of Intelligent Systems

##### Conference:

1. NCATM 2017
2. CSCITA 2017
3. ICAC3 2019
4. ICAC3 2015
5. RACEM 2015, 2016, 2017
6. ICRTITCS-11, ICRTITCS-12

25. Reviewed one PhD thesis "Implementing a Deep Learning Approach for the Performance Prediction in Educational Information System", Amity University, March 2019

##### 26. Received **best paper awards**:

1. Harshula Tulapurkar, B. K. Mohan, **Varsha Turkar**, "Comparative Analysis of Use of Curvelet and Wavelet for Robust Invisible Watermarking for Satellite Images", 38th Asian Conference on Remote Sensing (ACRS-2017), October 23-27, 2017, New Delhi. (Supporting partners ISRO, IIRS, Indian Space Research Organisation, NCFC)
2. Advait Ambeskar, **Varsha Turkar**, Anup Bondre, Hetal Gosavi, "Path Finding Algorithm for Robotic Systems using Image Processing", 3rd International Conference on Computing, Communication, Control and Automation, Organised by IEEE Pune Section, 17th - 18th Aug 2017.

##### 27. **Programme attended**

1. Two days pre symposium tutorial on Artificial Intelligence (AI) and Machine Learning (ML) for Remote Sensing Data Analysis, Organised by Indian Society of Geomatics-Shillong Chapter & Indian Society of Remote Sensing- Shillong Chapter and Hosted by North Eastern Space Application Centre, ISRO, (18 and 19 Nov. 2019)
2. Attended 5 days webinar series on Aerial robotics for Beginners, organised by Bhagubhai Maftlal Polytechnic and InfiCorridor Solutions Pvt. Ltd. (19 to 23 May 2020)
3. Five days online FDP on Evolution from offline to online Teaching organised by Satish Pradhan Dnyanasadhana College, Thane in association with Dept. of IT, University of Mumbai (30 May to 3 June 2020)
4. One day workshop on Effective ways to develop E-Content organised by Smt. Devkiba Mohansinghji Chauhan College, Silvassa on 9 May 2020
5. Four days online Course on Examination Reform, Organised by AICTE, April 29- May 2, 2020
6. Webinar series organised by MHRD IIC from 28 April to 15 May 2020
7. Sixth e-Yantra Symposium (eYS-2019) organized by e-Yantra, IIT Bombay, at IIT Bombay (5 and 6 April 2019)
8. Three days NASA-ISRO Synthetic Aperture Radar (NISAR) Science Workshop Organised by Space Application Centre (SAC), ISRO, Ahmedabad (15 to 17 Nov. 2018)
9. IEEE Women in Engineering International Leadership Summit Kochi 2018, held at Kochi (7 and 8 September 2018)
10. IEEE GRSS sponsored 3 days training programme on Soil Moisture and Agricultural Monitoring using Microwave Remote Sensing Organised by IEEE GRSS and Space Applications Centre, ISRO, Ahmedabad (7 to 9 February 2018)

11. AICTE (QIP) Sponsored two-week short-term course on “Big Data Analytics”, Organized by Veermata Jijabai Technological Institute, Matunga, Mumbai. (10 to 19 May 2017)
12. Teacher training workshop on “E-Learning: Challenges and Opportunities” on 22 April 2017 at Sardar Patel COE, Mumbai
13. IEEE GRSS sponsored two days’ workshop on “Remote Sensing and GIS in Rural Agricultural System” at DBIT, Kurla (23 to 24 September 2017)
14. Microsoft education session "A digital transformation in education" organized by Microsoft Corporation India Private Limited, Santacruz (east), Mumbai on 23 November 2017
15. International Workshop PollnSAR 2017, Organized by European Space Agency, **ROME, 23-27 Jan. 2017**
16. AICTE sponsored two days national seminar on “Technologies for Development of Rural Areas” at SPIT (27 to 28 November 2017)
17. IEEE GRSS Bombay Chapter sponsored two days’ outreach program on “Remote Sensing and GIS in Service of India’s Development” held at VMCC, IITB on 8, 9 June 2017
18. One day workshop on “Deep Learning and Applications” organized by NVIDIA at IIT Bombay on 5th December 2016
19. India Trento Program under Advanced Research (ITPAR) sponsored Workshop on “Remote Sensing Image Analysis” at IIT Bombay on 16th – 18th April 2016
20. One day NASA-ISRO Synthetic Aperture Radar (NISAR) Science Workshop Organised by Space Application Centre (SAC), ISRO, Ahmedabad 16 Nov 2016
21. “Modern Instructional Media”, organized by National Institute of Technical Teacher Training and Research (NITTTR), Bhopal at Pune. (2nd Nov to 6th Nov. 2015)
22. Two days NASA-ISRO Synthetic Aperture Radar (NISAR) Science Workshop Organised by Space Application Centre (SAC), ISRO, Ahmedabad 19-20 Nov 2015
23. 2 days “e-Yantra Symposium” Organized by e-Yantra lab, IIT Bombay, 10,11 April 2015
24. Two days NASA-ISRO Synthetic Aperture Radar (NISAR) Science Workshop Organised by Space Application Centre (SAC), ISRO, Ahmedabad 17-18 Nov 2014
25. UGC-Sponsored Refresher Course at UGC Academic Staff College, University of Mumbai, Kalina Campus. (2nd Jan. to 21st Jan. 2012)
26. UGC-Sponsored Orientation Programme at UGC Academic Staff College, University of Mumbai, Kalina Campus. (29th Dec. 2009 to 25th Jan. 2010)

## **27. Conferences/Symposiums Attended:**

1. National Symposium on Innovations in Geospatial Technology for Sustainable Development with special emphasis on NER, Shillong, November 20-22, 2019
2. IEEE Geoscience and Remote Sensing Society (IGARSS 2019) a Flag Ship Conference of GRSS, **Yokohama, Japan**, July 27 to Aug 2, 2019
3. 38th Asian Conference on Remote Sensing (ACRS-2017), October 23-27, 2017, New Delhi. (Supporting partners ISRO, IIRS, Indian Space Research Organisation, NCFC)
4. IEEE Bombay Section Symposium (IBSS), Baramati, Dec. 21 and 22, 2016
5. International Conference, Environmental Health 2013-Science and Policy to Protect Future Generations, **Boston, USA**, Organized by Elsevier, March 3 to 6, 2013
6. Geomatrix-11, Organized by IIT, Bombay, Feb.26 and 27, 2011

7. IEEE Geoscience and Remote Sensing Society (IGARSS 2011) a Flag Ship Conference of GRSS, **Vancouver**, July 24 to 29, 2011
8. International Conference on Technology Systems and Management (ICTSM), Organized by SVKMs NMIMS University, Mumbai, Feb. 25 to 27, 2011
9. ICWET'11 International Conference & Workshop on Emerging Trends in Technology, Organized by Thakur College of Engineering And Technology, Mumbai, Feb. 25 and 26, 2011
10. ICWET'10 International Conference & Workshop on Emerging Trends in Technology, Organized by Thakur College of Engineering And Technology, Mumbai, Feb. 26 and 27, 2010
11. 2<sup>nd</sup> IEEE International Conference on Advances in Computer Vision and Information Technology: Advances and Applications (ACVIT 2009), Organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS), India, Dec. 16 to 19, 2009
12. Geomatrix-09, Organized by IIT, Bombay, Feb.28 to March 1st, 2009
13. NCICT-09, National conference, NMIMS University, March 6 and 7, 2009
14. National Conference on Communication and Signal Processing, Organized by Thaodmal Shahani Engineering College, Bandra, Mumbai, April 12-13 2007
15. National Conference NCACCN 2007, Organized by Padmashree Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, March 9-10, 2007

#### **27. Online Courses**

1. Machine Learning Onramp (1 week), Mathworks, 31 May 2020
2. Fundamentals of GIS (4 Weeks), University of California, Davis and offered through Coursera

#### **28. Projects guided**

Around 68 projects guided at M.E, MPhil, M.Sc., B.Sc. and B.E. level since 2004 till date.

#### **Ph.D. Completed:**

Student Name: Mrs. Sushopti D. Gawade

Dissertation title: "Usability Improvement in Agriculture Schemes and Development of Farm Management Tool e-KRISHIMITRA"

University: Pacific Academy of Higher Education and Research University, Udaipur, India

Completed: 2019

#### **Ph.D. Pursuing:**

Student Name: Mithilesh Vishwakarma

Dissertation title: "Processing and Analysis of SAR data using Speckle Reduction Techniques"

University: Pacific Academy of Higher Education and Research University, Udaipur, India

Started: May 2018

#### **List of publications in the related field**

## **Publication Summary:**

Total no of papers: 59

Scopus indexed: 23

Number of citations: 165

## ***International Journal***

1. **Varsha Turkar**, R. Deo, Y. S. Rao, S. Mohan, A. Das, "Classification Accuracy of Multi-frequency and Multi-Polarization SAR Images for Various Land Covers", **IEEE Journal of Selected Topics in Applied Earth Observations & Remote Sensing**, Vol.5, Issue3, pp. 936-941, June 2012. (Citation: 40).
2. Sushopti Gawade and **Varsha Turkar**, "Analysis of Digital Media Compatibility with Farmers in Maharashtra and Recommendation of Service Provider Design Framework 'E-Krishimitra'", *International Journal of Applied Agricultural Research*, ISSN 0973-2683 Volume 12, Number 1 pp. 77-86, 2017.
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