



## Dr. SANJAY R. GANORKAR

Professor & HOD, Information Technology



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### OVERVIEW:

**Qualifications:** Ph.D. (E&TC Engg.), ME (Advanced Electronics)  
**Experience:** Teaching -23 years, Industry - 12 years  
**Date of Joining STES:** 03/09/2002  
**Skills and Proficiencies:** Machine Learning, Artificial Neural Network, Digital Image Processing, Signal Processing, Principle and Practice of Management

### SIGNIFICANT ACHIEVEMENTS:

- Appointed as Referee for evaluating the Ph.D. Thesis.
- Developed and taught a new course on Artificial Neural Network and resulting in a 25% increase in student enrollment.
- Outstanding academic performance award 2007-2008 in SCOE.
- Outstanding academic performance award 2004-2005 in SCOE.
- AVISHKAR-2008 First Prize in Zonal Research Project Competition.
- Appointment as VC nominee (Subject Expert) for Ph.D. Selection of candidates in Ph.D. in E&TC at AISSMS- IOT on 29.01.16.
- Appreciation for academic excellence in the academic year 2014-15.
- Appreciation for academic excellence in the academic year 2015-16.
- Subject expert for Ph.D. admission interview Modern college of engineering in August 2015.
- Reviewer for NCSC2D Ram Meghe Institute of Technology & Research Amravati in Feb. 2016.
- Appreciation letter as an organizing committee member in FDP on Advances in wireless & mobile technology.
- Expert for Ph.D. progress monitoring committee AISSMS, Modern COE, Zeal College of Engineering, Pune in March 2016.
- Reviewer for International Conference ICCUBEA 2016 organized by PCCOE, Pune in June 2016.
- Coordinator for Core Placement Drive.
- Reviewer for IEEE International Journal.

### AREA OF EXPERTISE /RESEARCH INTERESTS:

- Deep Learning
- Machine Learning
- Artificial Intelligence
- Digital Image Processing
- Signal and System

### **NUMBER OF STUDENTS GUIDED:**

- Ph.D. - 09, M.E. – 46, B.E. – 100+

### **RESEARCH PUBLICATIONS:**

#### **Publication Summary:**

International Journals –100+  
International Conference –28  
National Conference – 53  
Book Chapter – 4  
H index– 9  
i10 Index – 7  
Citations- 340

<https://scholar.google.com/citations?hl=en&user=2zhmvQwAAAAJ>

### **FUNDED RESEARCH PROJECT:**

- Research Fund of 1,50,000/- received for Research work on Iris Recognition: An Emerging biometric Technology University of Pune, Pune as a Principal investigator for year 2007-08.
- Research Fund of 1,20,000/- received for Research work on Design & performance evaluation of patchwork coding-based Audio watermarking for signal processing attack from Savitribai Phule Pune University, Pune as a Principal investigator for year 2015-16.
- Research Fund of 2,10,000/- received for Research work on Artifact identification and elimination from brain activity pattern for Brain Computer Interface from Savitribai Phule Pune University, Pune as a Co- Principal investigator for year 2015-16

### **RESEARCH WORK:**

- Design, Development and Analysis of Variable Bandwidth Filter Bank to optimize the performance of Hearing Aid.
- Design and Performance Evaluation of Patchwork Coding & Biometric Based Audio Watermarking for Signal Processing Attack.
- Development of Delineation Algorithm for Right Ventricle from Cardiac Images.
- Development and Performance Evaluation of Algorithms for Detection and Classification of Diabetic Retinopathy Grading System.
- Modelling and Interpretation of Brain Activity Pattern for Enhancing Brain-Computer Interface as Assistive Technology.
- Improving Microaneurysms and Exudates Detection in Retinal Images using Various Algorithms for Diabetic Scenario.
- Lung Infection Analysis and Detection of COVID-19 in Computerized Tomography Scans using Deep Learning Approach.
- Person Identification using Iris Recognition.
- Design and Development of an algorithm for scene specific object identification and tracking in surveillance applications.
- Detection of Autism Spectrum Disorder by analysis of brain wave using Machine Learning.

### **NOTABLE GUIDED PROJECTS:**

Prominent Industrial /PhD/PG/UG projects guided.

### **RESOURCE PERSON TO INDUSTRY/ACADEMIA:**

- Deliver a guest lecture on “Principles and Practices for IT Management” For ME (E&TC) at GS Moze College of Engineering., Balewadi, Pune on 18<sup>th</sup>Aug 2011.
- Deliver a guest lecture on “Neural Network in Communication” For Department of E&TC, SCOE, Vadgaon(BK), Pune on 5<sup>th</sup> May 2012.
- Deliver a guest lecture on “Principles and Practices for IT Management” For ME (E&TC) at GS Moze College of Engineering., Balewadi, Pune on 13<sup>th</sup> Oct 2012.
- Deliver a guest lecture on “Neural Networks in Communication” For ME (E&TC) (SCOS) students 2012 - 13, at Dr. D.Y. Patil Institute of Engineering. & Technology, Pimpri, Pune on 29<sup>th</sup> Oct, 2013.
- Deliver a guest lecture on “Neural Networking” For MSC (Comp. Sci.) (SCOS) students on 19<sup>th</sup> Oct 2013.

### **SUBJECTS TAUGHT:**

- Machine Learning
- Deep Learning
- Artificial Intelligence
- Digital Signal Processing
- Soft Computing
- Principle and Practice of Management
- Multi-rate Signal Processing
- Digital Image Processing
- Signal System

### **FDP/STTP/SDP/WORKSHOPS ORGANIZED AS A COORDINATOR:**

- Organized a FDP on Image Processing Advances and Research Challenges

### **CONFERENCES ATTENDED:**

- More than 10 Conferences Attended.

### **FDP/STTP/SDP ATTENDED:**

- 20+ FDP/STTP/SDP Attended

### **RESPONSIBILITIES HANDLED AT STES/SCOE/DEPT:**

#### **Society Level**

- Organizing committee member for International Telecommunication Union (ITU) International Conference (ITU) held at Narhe Campus of STES.
- Committee member of SPANDAN-07.
- Committee Member: Sinhgad Karandak.
- Committee Member of Spot admission at Udaypur and Jaypur.
- Coordinator for organizing the Train The Trainer program of TE E&TC.

**Institute Level (SCOE)**

- Working as Head of Department Information Technology since 2022.
- Appointed as a Co-ordinators – Accreditation Team for the academic year 2005 – 06 at SCOE, Vadgaon (BK), Pune.
- Appointed as a Chief Test Administrator for MBA Central Entrance Test 2006 Scheduled on 26<sup>th</sup> Feb 2006 at SCOE, Vadgaon (BK), Pune.
- Appointed as a Staff Member to perform SE-CAP duties from 17 May 2010 at, SCOE, Vadgaon (BK) , Pune.
- Appointed as a Coordinator for The Purchase Committee on 6 May 2013 at SCOE, Vadgaon (BK) , Pune.
- STP Coordinator.
- Nodal officer (Procurement) under TEQIP-II.
- Appointed as a reviewer for ICIP-2015 at VIT, Pune on 16<sup>th</sup> – 19<sup>th</sup> Dec, 2015.
- Appointed as a Subject Expert for PhD Interviews in E&TC Engineering at AISSMS-IOIT, Pune on 29<sup>th</sup> Jan, 2016.
- Appointed as a Advisor & Convener of Research Program from 2015-2022.
- Worked as senior supervisor for the SPPU exam.

**Department Level**

- NBA / NAAC coordinator.
- Purchase Coordinator.
- Academic Monitoring Coordinator.
- ETESA & Exelsior coordinator for Dept.
- Coordinator for national level technical event Pinnacle-06.
- Ph.D. Coordinator.
- STP Coordinator.

**DECLARATION:**

I hereby declare that all the above information furnished by me are true to the best of my knowledge.

Date: 09 / 12 / 2024

Signature