



Dr. DHARMENDRA GOKULDAS GANAGE

Assistant Professor, Department of E & TC

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OVERVIEW:

Qualifications: Ph.D. (E&TC), ME (E&TC), BE (E&TC)
Experience: Teaching -18.5 years
Date of Joining STES: 23/07/2008
Skills and Proficiencies: Smart Antenna, VHDL, MATLAB, Computer Vision, Drowsiness Detection, PCB Designing, Optimization Techniques

SIGNIFICANT ACHIEVEMENTS:

- Editorial Board Members/Reviewers for Computer Science and Information Technologies, Sep. 2020
- Editorial Board Members/Reviewers for International Journal of Advances in Applied Sciences, Aug. 2020
- Editorial Board Members/Reviewers for Indonesian Journal of Electrical Engineering and Computer Science, Aug. 2020
- Associate Editor for International Journal of Electrical and Computer Engineering, Jun. 2020
- Developed k-point lectures for subject control systems
- Published 3 papers in top-tier journals on smart antenna.
- Published a Book on Electronic Devices and Circuits
- Recognition as a Research Supervisor (Ph.D. guide) of SPPU, Pune

AREA OF EXPERTISE /RESEARCH INTERESTS:

- Signal Processing, DoA Estimation, Computer Vision Applications

NUMBER OF STUDENTS GUIDED:

- PG – 10, UG – 30+ Groups

RESEARCH PULICATIONS:

Publication Summary:

Scopus/ SCI - 13
International Journal: 29
Conference : 18
h-index : 05
i10 index : 02

<https://scholar.google.com/citations?hl=en&user=YzfUe60AAAAJ>

PATENTS GRANTED/PUBLISHED:

- IoT based air quality sensor device (Published – ID 358781-101)

RESEARCH WORK:

- Developed a computer vision-based system for real-time detection of drowsiness detection by detecting the entire face and only keeping the search region on both eyes. If the eyes are not blinking for periodic intervals, the system detects and warns the driver. This research work was sponsored by KPIT Cummins Infosystems Pvt. Ltd., Pune.
- Developed DoA estimation and optimization techniques for an adaptive antenna array to distinguish the closely spaced and coherent users. The pre-processing denoising techniques were developed before DoA estimation. The PSO and GSA optimization algorithms further investigated to find the minimum error and highest detection probability.

NOTABLE GUIDED PROJECTS:

- Design and Implementation of FPGA based RGB LED Driver, sponsored by Ishnatek systems and Servies Pvt Ltd. Kothrud, Pune in the academic year 2010-11.
- Raspberry pi-based surveillance security system, Sponsored by Homescool Services India Pvt Ltd. Pune in the academic year 2021-22.
- Contactless attendance management system using AI, Sponsored by Homescool Services India Pvt Ltd. Pune in the academic year 2021-22.
- Adaptive Robotic Gripper Control Through Sensor Perception, Sponsored by DIAT, Pune in the academic year 2023-24
- Implementation of Memristor Using Cadence Virtuoso, Sponsored by DIAT, Pune in the academic year 2023-24
- Implementation of Nand Flash Memory Using Adiabatic Logic Circuits, Sponsored by DIAT, Pune in the academic year 2023-24

RESOURCE PERSON TO INDUSTRY/ACADEMIA:

- Session Chair for Nat. Conf. on Pervasive Computing, at Sinhgad College of Engineering, Pune, Apr. 05, 2024
- Session Chair for 5th IEEE International Conference on Information, Implementation, & Innovation in Technology” at International Institute of Information Technology, Pune, Dec. 15-17, 2022
- Session Chair for IEEE International Conference on Computing Communication Control and Automation, at Pimpri Chinchwad College of Engineering, Pune, Aug. 26-27, 2022
- Session Chair for IEEE International Conference on Pervasive Computing (ICPC-2020) at Sinhgad College of Engineering, Pune, Feb. 13-14, 2020
- Reviewer for the 4th International Conference on Fuzzy Systems and Data Mining (FSDM 2018), Bangkok, Thailand in November 2018.
- Reviewer for 9th Nat. Conf. on Advancements in Communication, Computing & Electronics Technology at Modern Education Society’s College of Engineering, Pune, Apr. 28-29, 2023

- Reviewer for 5th IEEE International Conference on Emerging Smart Computing & Informatics at All India Shri Shivaji Memorial Society's Institute of Information Technology Kennedy Road, Pune, Mar. 01-03, 2023
- Reviewer for IET Communications, Jan. 2022
- Reviewer for IEEE Transactions on Aerospace and Electronic Systems, Sep. 2021.
- Technical Program Committee Member for IEEE International Conference on Computer Science, Information Technology & Electrical Engineering (ICOMITEE '21) at Banyuwangi, Indonesia, Oct. 27-28, 2021
- Reviewer for IET Signal Processing, Aug. 2021
- Reviewer for International Journal of Artificial Intelligence, May 2021
- Reviewer for Microwave and Optical Technology Letters, May 2021
- Reviewer for Indonesian Journal of Electrical and Computer Science, Apr. 2021
- Editorial Board Members/Reviewers for Computer Science and Information Technologies, Sep. 2020
- Reviewer - "International Journal of Electrical and Computer Engineering," Aug. 2020
- Editorial Board Members/Reviewers for International Journal of Advances in Applied Sciences, Aug. 2020
- Editorial Board Members/Reviewers for Indonesian Journal of Electrical Engineering and Computer Science, Aug. 2020
- Reviewer for International Journal of Computing and Digital Systems, Jun. 2020
- Associate Editor for International Journal of Electrical and Computer Engineering, Jun. 2020
- Reviewer for Wiley International Journal of Communication Systems, Nov. 2019
- Reviewer for IETE Journal of Research, Nov. 2019
- Reviewer for TELKOMNIKA, Sep. 2019
- Reviewer for IEEE Signal Processing Letters, Mar. 2019
- Reviewer for IEEE Access, Jan. 2019
- Delivered an 21-expert session/lectures to SE/TE/BE students at various institutes under SPPU, Pune. These sessions based on VLSI, Digital Electronics, Control Systems, Electromagnetic, and Microwave Engineering,
- Delivered expert sessions to Nichrome India Ltd., Pune on Design of PLD using the concepts of Digital Design, on 29th June 2015
- Worked as Course-wise Industry Consultation Committee Member for reviewing the course content of Non-linear & Digital Control Systems for TY-BTech Electrical Engineering, Walchand College of Engineering, Sangli, on Jan. 21, 2021.

SUBJECTS TAUGHT:

- VLSI Design and Technology
- Digital Electronics
- Control System
- Microwave Engineering
- Electromagnetic Engineering
- Mobile Communication

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

- Seminar on Cyber Security & Dark web, Sinhgad Technics 2024, on Feb. 15, 2024
- Two days State Level Workshop: NEP-2020: Establishment of R&D Cell in Institutions, Sinhgad College of Engineering, Pune, on Feb. 07-08, 2023.

- One Week Faculty Development Program on Recent Trends in Communication Engineering (RTCE '21), Sinhgad College of Engineering, Pune in association with IEEE Communication Society Pune Chapter, Aug. 23-27, 2021.
- Webinar on Use of IOT for Control Systems, Sinhgad College of Engineering, Pune in association with IETE Pune Centre, May 31, 2021

CONFERENCES ATTENDED:

International and National Conferences/Symposia: 10

FDP/STTP/SDP ATTENDED:

- AICTE / TEQIP sponsored Programs: 39
- Non-sponsored Programs: 44

RESPONSIBILITIES HANDLED AT STES/SCOE/DEPT:

Society Level

- Worked as a Spot Admission Drive member for outside Maharashtra students in year 2017 and 2024
- Organizing committee member for International Telecommunication Union (ITU) International Conference (ITU) held at Narhe Campus

Institute Level (SCOE)

- Working as an Alumni Institute Co-Ordinator of the Institute since July 2016
- Worked as TE / BE Central Assessment Program (CAP) Officer - Nov. 2023 & Apr. 2024
- Worked as Institute level Graduation Ceremony Co-Ordinator
- Worked as Institute level First year Admission Committee Member
- Worked as Taluka Co-Ordinator for Mission Admission Counseling Cell
- Organizing committee member for INNOVATION, Avishkar

Department Level (E&TC)

- Teacher Guardian, Class Teacher
- Organizing committee member for various Faculty Development Programs & National, International Conferences
- Departmental PPT presentation Co-Ordinator
- University Online Examination Co-Ordinator
- Project Guide for BE & ME students
- NBA/NAAC committee member
- Department Mini-Project Coordinator
- Departmental Techtonic Event Co-Ordinator (Event seminar)

DECLARATION:

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

Date: / / 2024

Signature