

Yogita Sandip Khandge

Present position

- Assistant Professor

Contact Details (Mention e-mail) – fergusson.edu or despune.org



020-67656042



yogita.khandge@fergusson.edu



<https://www.linkedin.com/in/yogita-khandge-b49494148/>

Work Experience

- Teaching: 17 Years as on 1st Aug 2022

Personal Profile

Having 17 years of experience in academics and teaching post graduate in Electronic Science, focusing on result oriented vision, ready to accept new challenges. Giving guidance to students in projects in various domains, presentations. Active team member of various allied committees like feedback, academic.

Courses Taught

1. Instrumentation
2. Industrial Process Control
3. Embedded System Design with ARM
4. Digital Signal Processing
5. Embedded Processors
6. Fundamentals of RTOS

Field of Specialization/Areas of Interests

1. Embedded System
2. Controllers (8051, AVR, ARM, Raspberry-Pi),
3. Programming Languages : C Programming, Embedded C, Verilog, MATLAB
4. Real Time OS
5. PLC/SCADA
6. Lighting Simulation, Glare

Education

- **Ph.D. – (Electronic Science): from 19/04/2022 (Perusing)**
Title of the Thesis: “Evaluation of Discomfort Glare for Various Workplaces and Study of Its Psychological Effects on Human Being”
Name of University / Institution: Department of Electronic Science, Fergusson College (Autonomous), Savitri Bai Phule University, Pune
- **Master of Science/Arts- (Electronic Science):** 2005, Fergusson College, Pune University, Pune
- **Qualified UGC NET with JRF in 2010**
- **Bachelor of Science- (Electronic Science):** 2003, Sangamner College, Pune University, Sangamner, Dist: Ahmednagar

Fellowship/Awards/ Certifications/Achievements/Recognitions

1. Qualified UGC NET with JRF in 2010
2. Awarded IEEE SSCS and CAS Second best paper in the Poster presentation category in the National Conference on 'Advances in Electronics and its Interdisciplinary Application [NCAEIA-2014]', Khandge Y.S, Tilekar R.T, Das Ritika and Dr. Zambare M.S., "Implementation of real time Audio effects on TMS320C6713 DSK"
3. Second rank in Best paper presentation 'International Multidisciplinary Conference On Innovations, Research and Challenges In Current Global Scenario (ICIRC-2022)' on "Evaluation and Analysis of Discomfort Glare by using DIALux Lighting Simulation Software" by INSPIRA on 27th August 2022

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
Feedback Committee	SPEED Member	BOS Member, Department of Electronic Science, Fergusson College (Autonomous), Pune
Academic Committee		
ERP ADMIN		

Employment History

- 1) **Organization : Fergusson College (Autonomous)**
Role : Assistance Professor
Duration : August 2005- August 2022

Responsibilities	<ol style="list-style-type: none"> 1. Responsible for implementing and conducting Practical course of 1st and 2nd Year M.Sc. 2. Set up of practical, preparation of booklet for practical course 3. Preparation and teaching of subject - Digital System Design, Digital Signal Processing, Embedded System, Advanced Embedded System, Semiconductor Physics, RTOS, Industrial Process Control. 4. Currently working on ARM7 LPC2148 Board, and Real time OS, IoT, Industrial Process Control , Python programming, 5. Guidance for Academic projects to the students 6. Organized various workshop / Guest Lecture under DBT (Dept. of Biotechnology), CPE (College with potential for Excellence) and CE (College of Excellence) scheme for M.Sc. Students. 7. Team member of Academic and Feedback committee. 8. Organized Project Exhibition in Dept. of Electronic Science of M.Sc. Students 9. Preparing and evaluating of CE and ESE for theory and practical's.
-------------------------	--

Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration	Type (Minor/Major)	Outcome
----------------------	------------------------	-------------	----------	--------------------	---------

Surveillance camera using Raspberry Pi	MAST Program of UGC - CE	5000	2018-2019	Minor	The project completed successfully.
Smart Robotic Arm With Raspberry Pi	“College of Excellence” (CE)	10000	2019-2020	Minor	The project completed successfully.
IoT based contactless body temperature monitoring using Raspberry Pi with Camera and Email Alert	DBT STAR project	10000	2020-2021	Minor	The project completed successfully.

Research Publications/Presented in National and International Journals

1. **Yogita Khandge^a**, Jayashri Bangali^b, Madhukar Zambare^c, “Evaluation and Analysis of Discomfort Glare by using DIALux Lighting Simulation Software”, International Multidisciplinary Conference On Innovations, Research and Challenges In Current Global Scenario (ICIRC-2022), Inspira Research Association- Ira, Jaipur, Rajasthan, India.
2. **Yogita Khandge^a**, Jayashri Bangali^b, Madhukar Zambare^c, Ranjana Ubale^d, Panchsheela Kamble^e, “Secured Home Vigilance System Using ESP32-CAM with Telegram”, International Conference on recent Trends in Science and Technology, Wilingdon College, Sangali 29th June 2022
3. Dhiraj P. Shelke, Vishal F. Sharma, Ms. Panchsheela Kamble, **Ms. Yogita Khandge**, Dr. Kalpana Kulkarni, Ms. Ranjana Ubale, “Design and Implementation of Smart Dustbin System on the Campus”, International Conference on recent Trends in Science and Technology, Wilingdon College, Sangali 29th June 2022.
4. Satish Kanwade, Dushyanat Pethkar, Shriram Kulakarni, **Ms. Yogita Khandge**, “Smart Switch Using Gesture”, International Conference on recent Trends in Science and Technology, Wilingdon College, Sangali 29th June 2022.
5. Chinthapatla Sri Varshini, Mohammad Arif Khan, **Yogita Khandge** And Ranjana Ubale “Telepresence Surveillance Robot Using Raspberry Pi “MAZEDAN COMPUTER ENGINEERING TRANSACTIONS Article id-MCET0101004 Vol-1, Issue-1 Received: 11 Nov 2019 Revised: 23 Dec 2019 Accepted: 27 Jan 2020.
6. Akshay Mohite, Meghasham Birari, **Yogita Khandge** and Ranjana Ubale, Conference on Engineering Systems Design and Optimization, presented a paper titled “IoT Based Smart Aquaponics System”, held on February 27-28, 2020.

7. **Khandge Y.S, Tilekar R.T., Komal Deokar, Akshada Joshi and Dr. M. S. Zambare**, “Implementation of DT Filters in real time on TMS320C6713 DSK”, in National Conference on Advances in Electronics and its Interdisciplinary Application [NCAEIA-2014] on 19th and 20th September 2014 ISBN No. 9789351747833, pp-190.
8. **Khandge Y.S, Tilekar R.T, Das Ritika and Dr. M. S. Zambare**, Implementation of real time Audio effects on TMS320C6713 DSK”, in National Conference on Advances in Electronics and its Interdisciplinary Application [NCAEIA-2014] on 19th and 20th September 2014 ISBN No. 9789351747833, pp-194.
9. **Y. S. Khandge** , K. A. Kulkarni, N. M. Kulkarni, Dr. M. S. Zambare, “Development of Multi sensor board for Wireless Sensor Network”, National Conference on Sensor Networks and Embedded Systems(NCSNES-2011), at Abasaheb Garware College-Pune, 2-4 Feb. 2011.
10. **K. A. Kulkarni, Y. S. Khandge, S. P. Khedkar, N. M. Kulkarni, Dr. M. S. Zambare**, “Designing Multichannel Data Logging System For Monitoring Environmental Parameters”, National Conference on Sensor Networks and Embedded Systems(NCSNES-2011), at Abasaheb Garware College-Pune, 2-4 Feb. 2011.

Participation in Conferences/Seminars/Symposia/Workshop:

1.	Grant Writing Workshop	Research Coordination Committee, Fergusson College (Autonomous), Pune	2 days	25 th and 26 th July 2022
2.	Interrelationship between Pedagogy, Assessment and	IQAC, Fergusson College (Autonomous), Pune	1 day	23 rd May 2022
3.	Mentoring and supporting students 'openAUTOMATION Challenge 21'	B & R Industrial automation	7 Days	18 th 27 th Oct 2021
4.	Introduction to Programming of B&R control systems and software tools for handling and diagnosing	Training course by B&R Industrial automation	7 Days	8 th to 14 th Oct 2021
5.	Professional communication, Profile and Style Guide Workshop	Fergusson College, in association with Mettle Innovations	1 days	2 nd Feb2022
6.	Electronic Devices and its Application	Department of Electronics, Shri Shivaji Science & Art's College Chikhli on	1 day	6 th Aug 2021

7.	"Sensors Technology"	AICTE Training and Learning (ATAL) Academy Online Elementary FDP	6 Days	06/09/2021 to 10/09/2021
8.	"Recent Advances and Application of IoT in Renewable Energy Technologies"	AICTE Training And Learning (ATAL) Academy Online Elementary FDP	6 Days	23/08/2021 to 27/08/2021
9.	How to Write a Quality Research Article	by Sri Vidya Mandir Arts & Science College Uthangarai, Christ University Bengaluru and Jyothi Engineering College Thrissur	6 Days	24th May 2021 to 30th May 2021
10.	Research Methodology and IPR	FDP G. H. Rasoni College of Arts, Commerce and Science, Pune	One Week	26th April to 1st May 2021
11.	Research Workshop on Smart Transportation and Autonomous Systems (STAS 2021) In association with UKIERI (UK India Education and Research Initiative)	Indian Institute of Information Technology (IIIT), Sri City, Chittoor	5 Days	26 th to 30 th April 2021
12.	Internship on AR & VR	Gustovalley Technovation's	one month	5 th Apr to 5 th May 2021
13.	System Design using Raspberry Pi	Department of Computer Science, Fergusson College, Pune	3 Days	25 th to 29 th Jan 2021
14.	E-resources for Teaching, Learning, Research and IPR	by MIT Arts, Commerce & Science college, Alandi Pune	2 Days	10th and 11th July 2020
15.	Teachers on Tools for Online Teaching Learning and Evaluation	Swami Ramanand Teerth Marathwada University, Nanded	6 Days	1st – 6th July 2020
16.	Data Science and Artificial Intelligence	by Gustovalley Technovation's online FDP	2 Days	4 th to 6 th July 2020
17.	Data Science with python programming	by Smt.Kasturbai Walchand College (Art & Science), Sangli	3 Days	12 th to 14 th June 2020
18.	Internet of Things (IoT) and IT's Application in Industry	by Ramrao Adik Institute of Technology, Nerul, Navi Mumbai	5 Days	8 th to 12 th June 2020
19.	Linux OS Workshop: A practical approach towards learning OS concepts	Organized by Department of Mathematics, Fergusson College, Pune	5 Days	8 th to 12 th June 2020.
20.	IoT (Internet of Things) On-Line Mode	Geekslab Technologies Pvt. Ltd	2 days	15 th and 16 th Dec 2017

21.	PLC and SCADA	Prolific Systems and Technologies Pvt Ltd. (Fergusson College)	4 days	16 th to 19 th August 2017
22.	ARM Microcontroller	under DBT star	1 day	6 th April 2017
23.	Essential writing skill	Fergusson College	1 day	24 th Nov 2016
24.	PLC and SCADA	Prolific Systems and Technologies Pvt Ltd. (Fergusson College)	3 days	23 rd to 26 th August 2016
25.	Teachers Training Program	Fergusson College	7 days	24 th Nov to 1 st December 2014
26.	National Conference on Advances in Electronics and its Interdisciplinary Application [NCAEIA-2014]	Fergusson College	2 Days	19 th and 20 th September 2014
27.	Preparation and Implementation of M.Sc. Part 2 Electronic Science syllabus as per choice based credit system	Fergusson College	1 day	26 th Feb 2013
28.	Preparation and Implementation of M.Sc. Part 1 Electronic Science syllabus as per choice based credit system	Fergusson College	1 day	26 th Feb 2013
29.	Faculty Training Program on DSP and its applications	Garware College	2 days	16 th to 17 th Jan 2014
30.	Faculty Training Program on Nuvoton Numicrocontroller ARM Cortex M0 and its applications	Pune University	2 days	14 th to 15 th Jan 2014
31.	Research Planning and Technical paper writing under faculty training program	Fergusson College	2 Day	13 th to 14 th Jan 2014
32.	Autonomy of college and Role of IQAC, State level conference	Fergusson College	2 day	10 to 11 th Sep 2013
33.	Promotion on excellence in Electronics	Fergusson College	1 day	24 th Aug 2013
34.	India Edu Services (IES) training	University of Pune, Department of Electronic Science	2 days	23 rd to 24 th April 2013
35.	Panel Discussion on Research Methodology.	Fergusson College, Pune	1 day	27 th Mar 2012
36.	Embedded Systems (AVR Microcontroller).	PROTUS Systems Pune	1 day	20 th Oct 2012
37.	Teaching Methodology for MATLAB and C	Fergusson College Pune	1 day	8 th Jan 2011

38.	15th National Seminar on physics and Technology of sensors wireless sensor Network	University of Pune, Department of Electronic Science	1 day	3 rd March 2010
39.	T.Y. B.Sc. Syllabus revision on Microcontroller and Power Electronics	Fergusson College Pune	1 day	28 th Nov 2009
40.	Embedded System Development with hands on training using ARM Processor	Modern College Pune	3 days	20 th to 22 nd Oct 2008
41.	Revision in Syllabus - M.Sc.(Electronic Science) Part II	Modern College Pune	1 day	11 th Oct 2008
42.	New syllabus Implementation of M.Sc. (Electronic Science) Part I	Fergusson College Pune	1 day	21 st Aug 2008
43.	Project Management using MS Project tool	University of Pune	2 days	4 th and 5 th May 2008
44.	F.Y. B. Sc (Electronic Science) Syllabus Revision	Fergusson College Pune	1 day	6 th August 2007
45.	Non Credit courses at P G Level	Modern College Pune	1 day	11 th Feb 2006
46.	National Seminar on Advances in Software Technology	B N Sarda Science College Sangamner	3 Days	4 th to 6 th Feb 2006
47.	10th National Seminar on Physics and Technology of Sensors	VIT College Pune	1 Day	3 rd March 2004

Events Organized/Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1.	Summer School / Workshop "Current Trends in Transdisciplinary Electronic System- (CTTES -2022)"	Fergusson College (Autonomous),Pune	Team Member	18 th July 2022 to 23 th July 2022
2.	HACKATHON	Fergusson College (Autonomous),Pune	Team Member	March 2022
3.	Guest lecture on “Biomedical Instrumentation”,by Stryker Global Technology Center Pvt. Ltd.,Pune	Fergusson College (Autonomous),Pune	Coordinator	24 th march 2021
4.	Industrial visit and Study Tour to Precision Automation & Robotics India (PARI) Company Visit at Dhangarwadi (Shirwal)	Fergusson College (Autonomous),Pune	Coordinator	2 nd Feb 2020

	Tal Khandala, Dist Satara Maharashtra			
5.	BASICS OF RASPBERRY PI	Department of Electronic Science, M.Sc. Electronic Science Fergusson College (Autonomous)	Team Member	15 th June 2020
6.	RTOS (uC/OS-II) Workshop, MicroEmbedded Technologies Pune	Fergusson College (Autonomous),Pune	Coordinator	10 th February 2018
7.	Project Exhibition	Department of Electronic Science, M.Sc. Electronic Science Fergusson College (Autonomous)	Coordinator	11 th April 2018
8.	PLC/SCADA Training	Trainer Prolific System and Pvt. Ltd.	Coordinator	from 16 th August 2017 to 19 th August 2017
9.	Programmable Logic Controller (PLC), The Automation Research Association of India (ARAI).	Department of Electronic Science, M.Sc. Electronic Science Fergusson College (Autonomous)	Coordinator	26th August 2017
10	ARM family: Cortex – M3 (Hands on), MicroEmbedded Technologies Pune	Department of Electronic Science, M.Sc. Electronic Science Fergusson College (Autonomous)	Coordinator	08th September 2017

Additional skills/Activities

1. Team member of Academic Committee.
2. Team member of Feedback committee.
3. Coordinating and organizing various activities and workshop under DBT.
4. Invited as guest lecturer in Sangamner College, Sangamner, Dist: Ahmednagar
5. ERP Academic admin role till 2017
6. KPIT Consultancy Team
6. HACKATHON team member
7. Organized Industrial visit for PG students.
8. Organized various workshop / Guest Lecture under DBT (Dept. of Biotechnology), CPE (College with potential for Excellence) and CE (College of Excellence) scheme for M.Sc. Students.
9. Successfully completed sanctioned projects under DBT schemes.
10. Team member of KPIT Consultancy Team. (2020-2021)
11. Participation in Training course Introduction to Programming of B&R control systems and software tools for handling and diagnosing the same. On 08-10-2021 to 14-10-2021, organized by B&R Industrial automation.
12. Mentoring and supporting students 'openAUTOMATION Challenge 21', organized by B & R Industrial automation on 18-27 October, 2021.
13. Presenting research paper in various conferences

Course Content Developed (e-content)

1. Prepared the booklet copy of practical's M.Sc. I and II lab for every semester year wise.

Consultancy Services

1. Team member of KPIT Consultancy Team. (2020-2021)