

# Dr. Shaktikumar R. Shiledar

## Assistant Professor

shiledar.shaktikumar@gcoey.ac.in — 7972300757

Government College of Engineering Yavatmal , Maharashtra 445001

## Personal Information

**Date of Birth:** 30th May 1984

**Contact No:** 7972300757

**Email:** shiledar.shaktikumar@gcoey.ac.in

**Address:** Government College of Engineering, Yavatmal Dhamangaon Road Yavatmal, MH-445001

## Education

Degree	Institution	University	Year
M.Tech. (Instrumentation)	S.G.G.S.E&T, Nanded	S.R.T.M.U. Nanded	2012
B.Tech. (Instrumentation)	S.G.G.S.E&T, Nanded	S.R.T.M.U. Nanded	2008
Ph.D. (Instrumentation)	Government College of Engineering, Jalgaon	Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon	April 2025

## Experience

Institution	Level	Designation	From	To
Govt. College of Engg., Yavatmal	Graduate	Assistant Professor	04/08/2024	Present
Govt. College of Engg., Ratnagiri	Graduate	Assistant Professor	05/01/2023	03/09/2024
Govt. College of Engg., Jalgaon	Graduate	Assistant Professor	04/08/2017	28/12/2022
Govt. Residential Women's Polytechnic, Yavatmal	Diploma	Lecturer	05/08/2016	03/08/2017
Govt. Polytechnic, Mumbai	Diploma	Lecturer	10/01/2011	31/07/2016

## Projects

Project Title	Category	Year
Design of PID Controller using MOMI method	M.Tech	2012
LabVIEW-based project	B.Tech	2008
Discrete time sliding mode control strategies for performance improvement of systems	PhD	18/03/2025

## Publications

### Journal Articles

1. **Shaktikumar R. Shiledar**, Gajanan M. Malwatkar, Sachin S. Nerkar, ‘An Effective Disturbance Rejection by Discrete Time Sliding Mode Approach,” *The Indian Journal of Technical Education*, vol. 46, December 2023, pp. 159–166.
2. **Shaktikumar R. Shiledar**, Gajanan M. Malwatkar, ‘A Compressive Study on Discrete Time Sliding Mode Control with Advances and Applications,” *International Journal of Systems, Control and Communications*, vol. 13, no. 4, 2022, pp. 283–310.
3. **Shaktikumar Ranjit Shiledar**, ‘Relative Degree Two Discrete Time Sliding Mode Controller with Dynamic Switching Gain Strategy,” *Available at SSRN 4710882*.
4. **Shiledar S. R.**, Malwatkar G. M., Jadhav I. S., Lakhekar G. V., ‘Design of Discrete Sliding Mode Controller for Higher Order System,” *Reliability: Theory & Applications*, vol. 16, SI 1 (60), 2021, pp. 90–97.
5. Sachin Karad, Santosh Ghodake, Bhanudas Yadav, **Shaktikumar Shiledar**, ‘IRIS Image Specular Quality Artifact Evaluation for Biometric Recognition,” *International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJECIERD)*, vol. 3, no. 4, 2013, pp. 81–88.

### Conference Proceedings

1. **Shaktikumar R. Shiledar**, Gajanan M. Malwatkar, ‘A Discrete Time Exponential Relative Degree Two Reaching Law for Enhanced Performance,” *2025 1st International Conference on AIML-Applications for Engineering & Technology (ICAET)*, IEEE, pp. 1–5.
2. **Shaktikumar R. Shiledar**, Gajanan M. Malwatkar, ‘Design of a Robust Discrete Time Sliding Mode Controller With Dynamic Switching Gain,” *2022 IEEE Silchar Subsection Conference (SILCON)*, pp. 1–7.
3. V. S. Biradar, **S. R. Shiledar**, G. M. Malwatkar, ‘Discrete Time Sliding Mode Control Tuning Based on Dynamics of System Model,” *2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA)*, pp. 524–527.

### Book Chapters

1. **Shaktikumar R. Shiledar**, Gajanan M. Malwatkar, ‘Comparison of Discrete Time Sliding Manifold and Its Impact on System Dynamics,” In: *Smart Sensors Measurement and Instrumentation: Select Proceedings of CISCON 2021*, Springer Nature Singapore, 2023, pp. 411–421.

## Skills and Expertise

- **Instrumentation & Control:** Process control, Sensors & transducers, SCADA, PLC, DCS systems.
- **Embedded & Automation:** Microcontrollers (8051, ARM), Arduino, Raspberry Pi, Robotics, IoT.
- **Software Proficiency:** MATLAB/Simulink, LabVIEW, Multisim, Proteus, AutoCAD Electrical, Python.
- **Academic & Research:** Curriculum design, Outcome-based education, Research guidance, Technical writing.
- **Soft Skills:** Team leadership, Academic mentoring, Workshop organization, Communication skills.

## Professional Membership

The Indian Society for Technical Education (ISTE), Lifetime Membership No. LM 118495.

## Workshops and Training Attended

35<sup>+</sup>, List is enclosed below

## Administrative Responsibilities Shared / Positions Held

- **Coordinator for “Industrial Automation Course”** under the Continuous Education Programme (CEP) in the Instrumentation Department at Government Polytechnic, Mumbai, during the academic year 2012-13.
- **Co-coordinator for the National Conference** on “Evolutionary Optimization” (NECOTA-2014) at Government Polytechnic, Mumbai.
- Worked as a **member of various committees** for Academic Monitoring, Inspections, and Enquiry for Diploma/Degree Engineering colleges formed by the Directorate of R.O. Mumbai and MSBTE, Mumbai.
- Served as **End-Term Officer Incharge (Examination)** at Government Polytechnic, Mumbai, during the academic year 2015-16.
- Deputed as a **member to frame rules and regulations** and intake variations for first-year admissions in Engineering colleges at the Directorate of Technical Education (DTE), Mumbai, for the academic year 2015-16.
- **Co-coordinator for the Community College Scheme** at Government Polytechnic, Mumbai, during the academic year 2015-16.
- Conducted **Practical Examinations** at Government Polytechnic, Mumbai, for the selection of Diploma Engineers for ONGC Company in the year 2015-16.
- Worked as the **Center In-charge for the MH-CET Exam** at K.J. Somaiya Engineering College, Bandra (W), Mumbai.
- Served as the **Institute-Level NBA Co-coordinator** at G.R.W.P., Yavatmal, in the year 2016-17.
- Held the **additional portfolio as Assistant Registrar (Technical)** at Government College of Engineering, Jalgaon, from 2019 to 2023.
- Worked as the **Assistant Training and Placement Officer** at Government College of Engineering, Jalgaon, from 2018 to 2023.
- Served as a **committee member in various institute-level committees** formed as per AICTE norms at Government College of Engineering, Jalgaon, from 2018 to 2023.
- Actively participated in the **development of departmental laboratories** under TEQIP-III and utilized World Bank funds at Government College of Engineering, Jalgaon, from 2018 to 2021.
- Held the **additional charge as Library In-charge** at Government College of Engineering, Ratnagiri, and utilized funds sanctioned under the State Government scheme from 2023 to 2024.
- Worked as the **Nodal Officer and PRO** for the recruitment process of Class III and Class IV staff through the GeM portal at Government College of Engineering, Jalgaon.
- Handled various responsibilities in **examination conduction** for Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere, from 2024 to the present.
- Currently handling the responsibility of **AICTE and DBATU affiliation processes** for Government College of Engineering, Yavatmal.

## Declaration

I hereby declare that all the information mentioned above is true to the best of my knowledge.

Place: Yavatmal

Date: 16/04/2025

**Shaktikumar R. Shiledar**

Name of STTP	Sponsor Agency	Name of College	Duration and Dates
Content Updating on Computer Security	MSBTE, Mumbai	Government Polytechnic Mumbai	One week (10/01/2011 to 14/01/2011)
Induction Training Programme - Phase I	NITTR, Bhopal	Government Polytechnic Mumbai	Two weeks (18/04/2011 to 29/04/2011)
Control System & Its Applications	MSBTE, Mumbai	V.E.S. Polytechnic, Chembur	One week (12/09/2011 to 16/09/2011)
OrCAD Softwares	WINspect Infosystem Pvt. Ltd., Navi Mumbai	Government Polytechnic Mumbai	One week (12/03/2012 to 16/03/2012)
Induction Programme Phase II	NITTR, Bhopal	NITTR, Bhopal	Two weeks (10/06/2013 to 21/06/2013)
Matlab Software	NITTR, Bhopal	NITTR, Bhopal	Two weeks (22/07/2013 to 02/08/2013)
Foundation Training for Lecturers Phase I, II & III	Govt. of Maharashtra Higher and Technical Education Dept.	Yashada, Pune	Six weeks (13/01/2014 to 22/02/2014)
Progressive Electrical Systems	MSBTE, Mumbai	VPM's Polytechnic, Thane	One week (17/12/2014 to 21/12/2014)
Industrial Training for Faculty (Chemical & Instrumentation Dept.)	MSBTE, Mumbai	Rashtriya Chemicals & Fertilizers Ltd., Mumbai	One week (07/09/2015 to 11/09/2015)
Renewable Energy Source for Sustainable Development	AICTE (QIP)	V.J.T.I. Mumbai	One week (14/12/2015 to 18/12/2015)
GIS and Remote Sensing Application in Engineering	TEQIP	Government Engineering, Karad	One week (22/02/2016 to 26/02/2016)
NBA and Curriculum Development	NITTR, Bhopal	Government Polytechnic Mumbai	One week (18/04/2016 to 22/04/2016)
Orientation Workshop for NBA Activity	DTE, Mumbai	COEP	One day (23/12/2016)
NBA Accreditation Process	ISTE	G.R.W. Polytechnic, Yavatmal	One week (12/06/2017 to 16/06/2017)
Data Analytics and Machine Learning	TEQIP-III	Government College of Engineering, Jalgaon	One week (25/09/2018 to 29/09/2018)
Power System Simulation using CYME and PSIM	TEQIP-III	Government College of Engineering, Jalgaon	One week (28/01/2019 to 01/02/2019)
Improvement of Technical Education System & Industry-Institute Interaction	DTE, Mumbai	Government College of Engineering, Jalgaon	One week (21/01/2019 to 25/01/2019)
Professional Development Training	TEQIP-III	IIM Raipur	One week (26/03/2019 to 30/03/2019)
Capacity Enhancement Training Program for Faculty & Staff	TEQIP-III	Government College of Engineering, Jalgaon	One week (16/07/2019 to 20/07/2019)

<b>Name of STTP</b>	<b>Sponsor Agency</b>	<b>Name of College</b>	<b>Duration and Dates</b>
Biomedical Engineering	TEQIP-III	Government College of Engineering, Jalgaon	One week (05/08/2019 to 09/08/2019)
Process Control - Design, Analysis and Assessment	Ministry of HRD (NPTEL)	IIT Madras	12-week (Jan–Apr 2019)
Advances in Power Converters and Renewable Energy Control	AICTE	KCES's College of Engineering & IT, Jalgaon	Two weeks (22/11/2019 to 05/12/2019)
Introduction to Machine Learning and Deep Learning	CE & QIP (TEQIP-III)	IIT Bombay	One week (11/11/2019 to 15/11/2019)
Induction Program for Officers in Higher & Technical Dept.	Higher Technical Department	Yashada, Pune	One week (30/12/2019 to 03/01/2020)
Linear Dynamical Systems	Ministry of HRD (NPTEL)	IIT Madras	8-week (Jan–Mar 2020)
Robotics & Automation	TEQIP-III	IIT Delhi	Three days (12/03/2020 to 14/03/2020)
MATLAB Applications in Engineering and Science	TEQIP-III	Government College of Engineering, Karad	One week (27/04/2020 to 01/05/2020)
Inculcating Universal Human Values in Technical Education	AICTE	—	One week (03/01/2022 to 07/01/2022)
Research Tools for Advanced Instrumentation & Control	DTE, Mumbai	Government College of Engineering, Chandrapur	One week (08/02/2022 to 12/02/2022)
Emerging Trends in Electro-Hydraulic and Pneumatic Systems	DTE, Mumbai	College of Engineering Pune	One week (21/02/2022 to 25/02/2022)
Artificial Intelligence and Machine Learning	DTE, Mumbai	Government College of Engineering and Research, Avasari (Kh)	One week (08/03/2022 to 12/03/2022)
Quality Assurance and Accreditation in NEP 2020	DTE, Mumbai	Government College of Engineering, Jalgaon	One week (31/01/2023 to 04/02/2023)
Advanced Linear Continuous Control Systems (NPTEL)	Ministry of HRD (NPTEL)	—	12-week (Dates not specified)
Introduction to Research (NPTEL)	Ministry of HRD (NPTEL)	—	Duration not specified