#### **Personal Information:**

Full Name - Dr. PRASHANT JAICHAND GAIDHANE

Date of Birth – **08 JUNE 1977** 

Designation - ASSOCIATE PROFESSOR (CAS) INSTRUMENTATION ENGG. DEPTT., DEAN IQAC

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Contact No. - 9011630306

Dr. Prashant J. Gaidhane - Google Scholar,

(26) Dr. Prashant Gaidhane | LinkedIn



#### 2 Educational Information:

Sr.no.	Education	University	Percentage	Passing year	Specialization	Special Honor
1	B.E.	D. BAMU, A' Bad	63	1998	Instrumentation	First Class
2	M.Tech.	I.I. Sc. Bangalore	7.1/8.0	2009	Instrumentation	Distinction
3	Ph. D.	I.I.T. Roorkee		May 2019	Control System	

#### 3 Experience: a. Employment Record

Sr.no.	Organization / Institute	Designation	Working Period	
1	Govt college of engg. Chandrapur	Assistant Professor	20/02/2002 to	
1	Govi conlege of engg. Chandrapur	Assistant Floresson	15 / 10/ 2010	
2	Govt college of engg. Jalgaon	Assistant Professor	15 / 10/ 2010 to	
2	Govt conlege of engg. Jargaon	Assistant 1 Totessor	20/06/2014	
3	Govt college of engg. Jalgaon	Associate Professor	21/06/2014 to till date	
3	Govi conege of engg. Jargaon	(CAS)	21/00/2014 to till date	

## 4 Subject Offered/ Taught:

Sr.no	Course	Class	Branch	Subject
1	Instrumentation	Final	Instrumentation	Bio Medical Instrumentation
2	Instrumentation	Final	Instrumentation	Neural Network and Fuzzy Logic Control
3	Instrumentation	Second	Instrumentation	Automatic Control System
4	Instrumentation	Third	Instrumentation	Microcontroller and Application
5	Instrumentation	Third	Instrumentation	Analytical Instrumentation
6	Instrumentation	Final	Instrumentation	Instrumentation System Design
7	Open Elective	Third	Other	Introduction to Biomedical Instrumentation
8	ME ETC	FY and SY	ETC	Bio Medical Engineering

## 5 Areas of Research / Interest:

Sr.no.	Research Area	Details	Grant Available
1	Artificial Intelligence, Fuzzy logic		
2	Control System		
3	Evolutionary Algorithms.		

# 6 Administrative Responsibilities:

## Worked as a

Sr.no.	Responsibility	Organization	Duration
1	Technical Registrar	GCOE Jalgaon	2014-2016
2	Rector	GCOE Jalgaon	2019-2024
3	Dean T and P, III	GCOE Jalgaon	2014-2015
4	Sub nodal officer Procurement	GCOE Jalgaon	2012-2014
5	Library In-charge	GCOE Jalgaon	2014-2015
6	In-charge HOD Instrumentation Dept.	GCOE Jalgaon	2010-2011
7	Vice President Gymkhana	GCOE, Chandrapur	2009-2010
8	Store Officer	GCOE, Jalgaon	2012-2013
9	Dean IQAC	GCOE, Jalgaon	2024-
10	HoD Instrumentation	GCOE, Jalgaon	2022-2023

## b. Other responsivities Held

Sr.no.	Responsibility	Organization	Duration
1	In charge FY admission	GCOE, Chandrapur	2004-2006
2	Exam In charge	GCOE, Chandrapur	2005-2006
3	Security Officer	GCOE Jalgaon	2019-2024
4	Head and member purchase committee	GCOE Jalgaon	2012-2024
5	Instrumentation BoS Chairman	GCOE Jalgaon	2022-2023
6	Instrumentation BoS Member secretary	GCOE Jalgaon	2019-2022
7	PhD Guide, Instrumentation Electrical	GCOE Jalgaon	2019-2024
8	Member Electrical BoS, KBCNMU	GCOE, Jalgaon	2019-2024

# 7 Membership of Scientific and Professional Society:

Sr.no.	Organization	Type of membership	Membership details (no. & date)
1	ISTE	Life membership	
2	IISc Almuni association	Life membership	2009 onwards
3	IITR Almuni association	Life membership	2019 onwards

# 8 Consultancy and Sponsored Research Activities:

Sr.no.	Organization	Type of Consultancy	Period	
1	Municipality region	CCTV system inspection	2019 onwards	
2	Municipality region	Street Light inspection	2019 onwards	

3	Municipality region	Building Light inspection	2019 onwards

9 No. of Ph.D. and ME/M.Tech/M.Phill Guided:

Sr. No.	Name of the Research Scholar PhD	Subject	Topic of Research	Registration Number and Date of registration e
1	Shirish Govind Adam	Performance Enhancement Of IN Complex Control Systems Using Soft Computing Techniques		PHD-2021-KYAMQZ 14-10-2022
2	Nitin Mahadeo Khandare	EE	Enhancement Of System Protection Through Discrimination Of Inrush Currents And Fault Currents Of Transformer	PHD-2021-X87OAL 14-10-2022
3	Mohammed Mujtahid Mohammed Mohsin Ansari	EE	Analysis And Enhancement Of Power System Stability Due To High Penetration Of Renewable Energy	PHD-2019-UGEKP6 21-01-2021
4	Nilesh Suresh Mahajan	EE	Optimal Design Of Demand Side Energy Management For Hybrid Energy Storage System	PHD-2021-6032LE 14-10-2022
5	Satish Shivnarayan Kabra	EE	An Efficient Hybrid Approach For Power Quality Improvement In Grid Tied PV Based EV Charging Station	PHD-2021-1ROEDG 1-12-2022
6	Vijay Sitaram Pawar	EE	Optimal Power Quality Enhancement Of Solar Photovoltaic Integrated Into Grid Using Hybrid Technique	PHD-2019-0PXF1Z 21-01-2021
7	Nagesh Sakharam Pande	EE	A Dynamic Real Time Interphase Power Flow Technique Of Railway Platform Roof Top Solar Power Interface With 25 KV Oh Traction	PHD-2017-ID5ZJR 10-12-2019
Ana Deepa Pralhadrao EE Dis		EE	Analysis Of Power Quality Issues In Distribution Systems And Its Mitigation Measures	PHD-2021-KYAMQZ 14-10-2022

Dr. Prashant J. Gaidhane - Google Scholar,

https://scholar.google.com/citations?user=YLI9o3sAAAAJ&hl=en

## **Journal publications**

- 1. P. J. Gaidhane and M. J. Nigam, "A hybrid grey wolf optimizer and artificial bee colony algorithm for enhancing the performance of complex systems", Journal of Computational Science, vol. 27, no. 7, pp. 284-302, July 2018. **SCI, IF. 1.925.**
- 2. P. J. Gaidhane, M. J. Nigam, A. Kumar, and P. M. Pradhan, "Design of Interval Type- 2 Fuzzy Precompensated PID Controller Applied to Two-DOF Robotic Manipulator with Variable Payload", ISA Transactions, vol. 89, pp. 169-185, Jun. 2019, SCI, IF. 3.370.
- **3.** P.J. Gaidhane and S. G. Adam, "The Enhanced Robotic Trajectory Tracking by Optimized Fractional-Order Fuzzy Controller Using GWO-ABC Algorithm" in Soft Computing: Theories and Applications: Proceedings of SoCTA 2021, 611-620, 2022 International

### **Conference publications**

- **1**. P. J. Gaidhane, A. Kumar, and M. J. Nigam, "Tuning of two-DOF-FOPID controller for magnetic levitation system: A multi-objective optimization approach", Computer Applications in Electrical Engineering-Recent Advances (CERA), 2017.
- **2**. P. J. Gaidhane and M.J. Nigam, "Multi-Objective Robust Design and Performance Analysis of Two-DOF-FOPID Controller for Magnetic Levitation System," pp. 1-6, 14th IEEE India Council International Conference (INDICON), 2017.
- **3**. A. Kumar, P. J. Gaidhane, and V. Kumar "A nonlinear fractional order PID controller applied to redundant robot manipulator", Computer Applications in Electrical Engineering Recent Advances (CERA), 2017
- **4**. A. Kumar, V. Kumar, and P. J. Gaidhane, "Optimal Design of Fuzzy Fractional Order Controller for Redundant Robot", Procedia Computer Science vol. 125, pp. 442-448, 2018.
- **5**. S. Adam, P. J. Gaidhane, "Performance Enhancement of Magnetic Levitation System Using GWO-ABC Tuned High-Dimensional Robust Controller", Soft Computing: Theories and Applications: Proceedings of SoCTA 2022, 507-518, 2023. International.
- **6**. P. J. Gaidhane, Nagesh Pande, and Dr. Atul Phadke, "Connection and Control Strategy for Direct Injection of Railway Platform Rooftop Solar Power into Traction Network" International Journal of Innovations in Engineering and Science 6 (10), 65 72, 2021 International

## **Book Chapters Publications.**

- 1. P. J. Gaidhane, A. Kumar, and R. Raj, "Tuning of Interval Type-2 Fuzzy Precompensated PID Controller: GWO-ABC Algorithm Based Constrained Optimization Approach" in Recent Trends on Type-2 Fuzzy Logic Systems: Theory, Methodology and Applications, 2023.
- 2. R. Raj, A. Kumar, and P. J. Gaidhane, "A Simplified Model of an Interval Type-2 Takagi-Sugeno Fuzzy PID Controller using One-Dimensional Input" in Recent Trends on Type-2 Fuzzy Logic Systems: Theory, Methodology and Applications, 2023.
- 3. A. Kumar, R. Raj, and P. J. Gaidhane, O Castillo, "Artificial Bee Colony Optimized Precompensated Interval Type-2 Fuzzy Logic Controller for a Magnetic Levitation System" in Recent Trends on Type-2 Fuzzy Logic Systems: Theory, Methodology and Applications, 2023.

### 11 Details of Participation in Technical Activity:

## a. Conferences/Seminars/Workshops

Sr.no	Title	Organizing body	Venue	Duration
	International Interactive	ADCC Nagpur and	SEGI University,	12 to 14
1	workshop on "Effective	SEGI University	Kuala Lumpur,	December 2013
	academic leadership	Malaysia	Malaysia	
	strategies"			
2	Seminar on "Understanding	WCE Sangali	WCE Sangali	15 and 16 March
	Jan 2013 format for NBA"			2013
	Workshop On "21st Century	Engineering Staff	Engineering Staff	03 to 05 Jun 2013
3	Outcome Based Engineering	College Of India,	College Of India,	
	Education"	Hyderabad	Hyderabad	

### b. STTP

Sr.No.	Title	Details Of Organizing Body	Venue	Duration	Job Responsibility
1	Emerging Trends In Engg. & Technology	NITTTR & JGIET, Jaipur	JGIET, Jaipur	22/5/06 to 26/5/06	Participation
2	Digital Control	IIT Mumbai	IIT Mumbai	20 June- 24 June 2005	Participation
3	VHDL Approach For Digital System Design.	YCCE, Nagpur And ISTE	YCCE, Nagpur	2 <sup>nd</sup> June To 14 <sup>th</sup> June 2003	Participation
4	MEMS Technology	IIT Kanpur	IIT Kanpur	3/1/2011 To 8/1/2011	Participation
5	SDP ON " Induction Program Phase I"	NITTTR, Bhopal	NITTTR, Bhopal	23/05/2011 03/06/2011	Participation
6	SDP ON " Developing Learning Resources Using Digital Media"	NITTTR, Bhopal	NITTTR, Bhopal	02/01/2012 13/01/2012	Participation
7	SDP ON " Recent Advances In Nanosciences And Nanotechnology"	School Of Chemical Tech., NMU, Jalgaon	School Of Chemical	15/06/2012 30/06/2012	Participation

			Tech., NMU, Jalgaon		
8	STC ON " Advanced Dsp Design Techniques "	IIT KHARAGPUR	II"T KHARAGPU R	27/06/2013 01/07/2013	Participation
9	Stochastic Modelling and optimal Control of Engineering Systems,	QIP Centre, IIT Roorkee	QIP Centre, IIT Roorkee	22.05.2017 to 26. 05. 2017,	Participation
10	MATLAB Fundamentals and Applications,	Govt. College of Engineering, Kalahandi	GCOEK	08.07.19 12.07.19	Participation
11	Biomedical Engineering, at	GCOE Jalgaon	GCOE Jalgaon	05.08.19 09.08.19	Participation
12	Finite Element Applications in Engineering	GCOE Jalgaon	GCOE Jalgaon	24.02.20 28.02.20	Participation
13	FDP on "Imaging Application through Matlab"	ICT Academy, IIT Roorkee,	IIT Roorkee	09-13 oct 2018.	Participation
14	"Faculty Development Program for Student Induction (FDP-SI) -	(AICTE).	Shri Mata Vaishno Devi University, Katra	5-7 March, 2020	Participation
15	"Sliding mode Control in Infinite —Dimensional Setting: Theory Extension and Applications".	Gian Course at IIT roorkee,	Gian Course at IIT roorkee,	07 to 11 November 2018.	Participation
16	Professional Development Programme for Sr. Academic cum Administratie Executives	TEQIP III	Indian Institute of Management Shillong	10.06.19 14.06.19, 01 week	Participation

# 12 Conference/Seminars/Workshop/STTP/CEP Organized:

Sr.no.	Title	Details of organizing body	Venue	Duration
1	One-Week Short Term Training Programme On "MATLAB:Fundamentals and Applications	Technical Education Quality Improvement Program- Phase III Coordinator Dr. P. J. Gaidhane	GCOE, Kalahandi	1st to 5th Jul 2019

# 13 Selections/Honors/Awards/Fellowship:

Sr.no.	Title	Organization	Duration	
1	QIP fellowship for M.Tech	Instrumentation Dept. IISC Bangalore	2007-2009	
2	QIP fellowship for PhD	ECE Dept. IIT Roorkee,	2016-2019	

# 14 Invited Talks as a Trainer/Faculty:

Sr.no.	Subject	Venue	Duration	Date of Talk
1	Biomedical Instrumentation	Trimurti Institute of Technology (Polytechnic)	11 am to 2 pm	10 <sup>th</sup> Aug 2013
2	MatLab applications in Soft computing	GCOE, Kalahandi	3 pm to 5 pm	4 <sup>th</sup> July 2019

3	Resource Person in AICTE Training And Learning (ATAL) Academy FDP on "Type-1 and Type-2 Fuzzy Logic and Its Applications"	Indian Institute of Information Technology Kota	06/12/2021 to 10/12/2021	
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This is to certify that the above information furnished by me is true to the best of my knowledge.

Date:

Name and signature of faculty