

PRAVEEN KUMAR

Assistant Professor

Department Of Electrical Engineering
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1. Qualification:

I. Professional Qualification:

S.No.	Degree (UG, PG, PhD)	Specialization	Institute	CGPA
1.	Ph.D. Pursuing	Electrical Engineering	IIT(ISM) Dhanbad	—
2.	M.Tech	Power Electronics & Electrical Drives	IIT(ISM) Dhanbad	9.30
3.	B.Tech	Electrical Engineering	BIT Sindri	8.45

II. Educational Qualification:

S.No	Exam. Passed	Board/University	School	Percentage (%)
1.	AISSCE	CBSE, New Delhi	JVM Shayamali, Ranchi	90.40
2.	AISSE	CBSE, New Delhi	JNV Barhat, Jamui	93.60

2. Area of Specialization: Power Electronics, Control System & Optimization

3. Subjects Taught:

- I. Control System
- II. Power Electronics
- III. Digital Control System
- IV. Basic Electrical Engineering
- V. Advanced Control System
- VI. Model Order Reduction

4. Professional Experience:

I. Teaching Experience:

S.No.	Position held	Name of Organization	From	To
1.	Assistant Professor (AGP 6000)	BIT Sindri	09/03/18	till date

II. Industrial Experience:

S.No.	Position held	Name of Organization	From	To
1.	Site Engineer (Electrical)	Rail Vikas Nigam Ltd. Guwahati	02/05/17	06/03/18

5. No. of Conference/ Workshop/Seminar Organized: **05**

S.No.	Title of Seminar/ Conferences/ Short – term Courses	Sponsored by	Date	Organizing Institute
1.	Entrepreneurs Meet	TEQIP Cell NPIU Govt. of India	15 th April 2018	Start-Up Cell BIT Sindri
2.	FDP on Advanced Industrial Automation using PLC & SCADA	TEQIP-III, BIT Sindri	01-05 Nov 2018	Department of EE & ECE in collaboration with SIEMENS COE, BIT Sindri
3.	“Challenges in Integration of Large-Scale Renewables in Indian Power System” (A Sustainable Solution using Artificial Intelligence)	TEQIP-III, BIT Sindri	27/08/2020	Department of Electrical Engg, BIT Sindri
4.	One week workshop on Electric Vehicle: Challenges and opportunities (EVCO-2022)	BIT Sindri	22nd – 26th August, 2022	Department of Electrical Engg, BIT Sindri
5.	One Week Workshop on Research Methodology & Research Paper Writing (RMRPW-2023)	BIT Sindri	13-17 February, 2023	Department of Electrical Engg, BIT Sindri

6. No. of Symposium/ Workshop/Seminar/Webinar/STTP Attended: **48**

S.No.	Title of Symposium/ Workshop/Seminar/ Short – term Courses	Dated	Organizing Institute
1.	Training on PLC (Programming Logic Circuit), SCADA, HMI (Human Machine Interfacing) & AC Drives by	18-23 March 2013	BIT Sindri in collaboration with Industrial String Automation
2.	TEQIP III NPIU sponsored Awareness Workshop on Outcome – based Education (OBE)	16–17 March 2018	BIT Sindri
3.	FDP on “ANN and Deep Learning”	11-15 June 2018	Electronics and ICT Academics by MeitY, Govt. of India at BIT Sindri
4.	FDP on “Advancement and application of soft computing in Electrical Systems”	13-17 July 2018	Electronics and ICT Academy, NIT Patna & Department of EE by MeitY, Govt. of India at BIT Sindri.
5.	Real-world applications of Distributed constraint optimization techniques and autonomous systems-RADCOPAS-2018	24-28 Sep 2018	Department of CSE & IT, BIT Sindri
6.	Faculty Development Program on “Wireless & Mobile Communication”	03-07 Dec 2018	Electronics and ICT Academy, NIT Patna & Department of EE by MeitY, Govt. of India at BIT Sindri.
7.	Antenna Trends	01-05 July 2019	E & ICT Academics
8.	Innovations for Sustainable Energy System	21/ 09/2019	IE & BIT Sindri
9.	Internet of Things	14-18 Oct 2019	IIT ISM Dhanbad
10.	Entrepreneurship Summit-2019	15-17 Nov 2019	Startup Cell & IIC, BIT Sindri
11.	Python Programming with Industry Perspective	2-6 Dec 2019	NIT Patna
12.	ICT Tools for Teaching Learning Process & Institutes	13-17 Jan 2020	E & ICT Academics

13.	International Symposium on 5G and Beyond for Rural Upliftment	08-09 Feb 2020	IIT (ISM) Dhanbad & BIT Sindri
14.	“Faculty Development Program for Student Induction (FDP-SI)”	20-22 Jan 2020	AICTE at CUJ Ranchi
15.	National Webinar Virtual Labs	16 April 2020	IET, Dr. RLA University Ayodhya & SPIU UP
16.	Autonomy and Control for Robotic Systems using MATLAB	15/05/2020	ELMAX Systems & Solutions
17.	“Mental Health Awareness For COVID-19”	16/05/2020	Dumka Engineering College
18.	‘Art of Online Teaching, Research Paper writing & Patent Registration	18-20 May 2020	ITM Nanded India
19.	Piezoelectric Based Energy Harvesting Techniques	03/06/2020	Mohamed Sathak AJ College of Engineering
20.	“Smart Energy Solutions to Boost Power Sector Economy During Pandemic”	06/07/2020	TMU Moradabad in association with (IIC), a venture of MHRD
21.	Environmental and Sustainable development	05/06/2020	DTE Rajasthan
22.	“Basics of Fire and Safety Engineering”	10/06/2020	Department of Fire Technology and Safety Engineering, NICHE, Tamilnadu
23.	Outcome Based Education Software	11/06/2020	vmedulife
24.	Developing an E-Content	18-19 June 2020	Department of CSE, Vaagdevi Engineering College, Bollikunta, Warangal
25.	Artificial Intelligence: Science of Present and Future	19/06/2020	Chandil Polytechnic, Jharkhand, India
26.	Entrepreneurship (Idea to Business Plan, Business Skills for Entrepreneurs, Startup to IPO)	06 May – 24 June 2020	BIT Sindri in collaboration with Alumni Association of North America (BITSAANA)

27.	Role of Artificial Intelligence in Future Microgrid Control"	17-20 June 2020	Silicon Institute of Technology, Sambalpur, Odisha
28.	Electric Vehicles: New Trends and Technologies	22-26 June 2020	Department of EEE, ABES Engineering College, Ghaziabad.
29.	Basics of Induction Motors	17 June – 25 July 2019	SIEMENS COE, BIT Sindri
30.	Basics of AC-DC Drives		
31.	Virtual Labs	29/06/2020	Jharkhand Education grid, RUSA Jharkhand, JUT & BIT Sindri jointly
32.	Microfabrication Technology	09/07/2020	JIS college of Engineering
33.	Higher Education 2020: Requirements and Expectations	08-12 July 2020	IQAC, TPCT's college of Engineering Osmanabad
34.	Free Open-Source Tools for Education and Research	07/07/2020	BIT Sindri, Dhanbad and FOSSEE, IIT Bombay
35.	Academic Excellence for Future Carrier	09/07/2020	Gitanjali Institute of Technical Studies, Udaipur
36.	NAAC Revised Accreditation Guidelines & Role of IQAC in Post COVID-19 Era	06/08/2020	IQAC, SVP CET, Nagpur in association with NAAC, Bangalore
37.	"Research and Practices in Civil Engineering (RPCE-2020)"	3 Aug -7 Aug, 2020.	Department of Civil Engineering, IGIT Sarang
38.	Basics of PLC	28 July -25 Aug 2020	SIEMENS COE, BIT Sindri
39.	Sustainable Environmental Engineering Practices 2020	21-25 Sept 2020	NIT Rourkela
40.	Open-Source Tool: Python 3.4.3	05-16 Oct 2020	BIT Sindri in association with Spoken Tutorial (ST), IIT Bombay
41.	Fractional Order Robust Control System Design (Series-I)	26-31 October 2020	Vardhaman College of Engineering, Hyderabad
42.	Ancient Indian Education System	11-12 Nov 2020	NITTTR Kolkata
43.	Fractional Order Robust Control System Design (Series-II)	23-28 Nov 2020	Vardhaman College of Engineering, Hyderabad

44.	Power System Modelling and Simulations	14-19 Dec 2020	Arya College of Engineering & IT Jaipur
45.	Advances in Renewable Energy Technology Opportunities & Challenges-PHASE-II	06-12 April 2021	Jodhpur Institute of Engineering & Technology (AICTE ISTE Sponsored)
46.	Mechanical Engg-Emerging Technologies	24-29 May 2021	Deptt. Of ME, BIT Sindri in
47.	Ecosystem Restoration	05/06/2021	The Institution of Engineers (India), Rajasthan State Centre, Jaipur
48.	Recent Advancement in Electrical Vehicle	10-16 Dec 2021	G H Raison Institute of Engineering and Technology, Pune

7. Publications:

S.No	Title of the Paper	Name of Journal/Conference	Year	DOI
1.	Medical Image Processing & Analysis using Deep Learning Approach.	IJBPAS	2021	https://doi.org/10.31032/IJBPAS/2021/10.11.1065
2.	An appropriate discrete-transformation technique for order reduction methodology	Array, Elsevier	2022	https://doi.org/10.1016/j.array.2022.100155
3.	Comparison Analysis of Maximum Power Point Tracking Between ANN and Cascade ANN	IEEE Conference	2022	https://doi.org/10.1109/iSSSC56467.2022.10051422
4.	Performance Analysis and Simulation of Brushless DC Motor using PI with Hysteresis Current Controller	IEEE Conference	2022	https://doi.org/10.1109/iSSSC56467.2022.10051496
5.	Analyzing Ordinary Differential Equations (ODEs) Using Numerical Integration Method in GNU Octave	IEEE Conference	2023	https://doi.org/10.1109/CSITSS60515.2023.10334223

6.	A Novel Model Order Reduction Technique for Approximation & Analysis of Hydropower System	IEEE Conference	2023	https://doi.org/10.1109/ICAEECI58247.2023.10370983
7.	Model Order Reduction Using Cuckoo Search Optimization Technique	IEEE Conference	2023	https://doi.org/10.1109/AIKIIE60097.2023.10390282
8.	Comparison of Order Reduction Techniques for Automatic Voltage Regulator	IEEE Conference	2023	https://doi.org/10.1109/C2I659362.2023.10430914

8. Patent:

S.No	Title of the Invention	Application No.	Journal No.	Year	Page	Status
1.	Method to Improve Renewable Energy System Efficiency by Smart Grid.	202141042895	45	2021	52241	Published
2.	Software Define Network Based Network Security Monitoring System.	202141038188	36	2021	39554	Published
3.	Boosting framework for semi-supervised learning with limited number of labeled examples and a Multitude of unlabeled examples.	202141037730	39	2021	43671	Published
4.	Block chain-based 5G smart grid identification and control of IoT devices	202141044809	42	2021	47927	Published

9. No. of NPTEL/SWAYAM/Online Course Attended: 15

S.No.	Title of NPTEL/SWAYAM/ Online Courses	Dated	Organizing Institute
1.	Digital Transformation in Teaching Learning Process (DTITLP) course	16 – 30 March 2020	NPIU & IIT Bombay

2.	Machine Learning	April – May 2020	TATA STEEL
3.	Induction Motor		
4.	Power System Protection		
5.	Power System generation		
6.	Power System Earthing		
7.	Power System Power Cables		
8.	Power System Transmission & Distribution		
9.	Transformer		
10.	Advance Microsoft Excel		
11.	MS Office		
12.	Total quality Management		
13.	Nonlinear System Analysis		
14.	Control engineering	Jan-April 2022	IIT Madras
15.	Power Quality	Jan-April 2023	IIT Madras

10. M.Tech. Thesis Guided:

S.No.	Roll No./Reg No:	Name of Student	Title of the Project	Status
1.	17PG117	Deepak Kr. Singh	Multilevel Inverter Based Single Phase Grid Connected PV System	Completed in July 2019
2.	19030750004	Diksha	Comparative Analysis of PI, PID and PID Tuned Method for PMDCM Speed Control	Completed in March 2023
3.	19030750021	Sandip Kumar	Efficient Power Utilization from Multiple Renewable Sources through DFIG Wind Farm Converter System	Completed in April 2022
4.	20030750024	Vikram Modi	Wireless Power Transfer using Parallel-Series Compensation	Completed in Dec 2022

			Circuit for Charging of Electric Vehicle	
5.	20030750016	Santosh kr. Sharma	Comparative Analysis of Output Power of PV Array using PSO and P&O	Completed in Dec 2022
6.	21030750210	Jyoti Kumari	Modeling & Analysis of Hybrid Renewable Energy System using Particle Swarm Optimization	Completed in Oct 2023

11. Administrative Position Held:

S. No.	Position Held	From (date/month/year) to till Date.
1.	Assistant Professor-in-charge, Academic	30 th Nov 2018
2.	Assistant Professor-in-charge, Measurement & Instrumentation Laboratory (EE)	14 th Sep 2018
3.	Assistant Professor-in-charge, Process Control Laboratory (Centre of Excellence)	14 th Sep 2018
4.	Mentor, First Year student	31 st Aug 2018
5.	Member, Anti-ragging committee	06 th Aug 2018
6.	Assistant Superintendent, Hostel No. 14	04 th Aug 2018
7.	Member, NIRF BIT Sindri	02 nd May 2018
8.	Nodal Officer, AISHE BIT Sindri	2018
9.	Coordinator, Institute Innovation Cell (ICC)	28 th Aug 2019
10.	Coordinator, NISP Cell BIT Sindri	05 th Oct 2020
11.	Assistant Professor-in-charge, High Voltage Laboratory (EE)	18 th Feb 2021
12.	Member Secretary, Internal Complaint Committee	08 th April 2021
13.	Assistant Co-ordinator, AICTE Student Learning Assessment Project	13 th Sep 2021

12. Members of Professional Bodies: ACDOS, IEEE

(Praveen Kumar)