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EDUCATIONAL QUALIFICATIONS

- B.TECH IN ELECTRICAL ENGINEERING, JALPAIGURI GOVT. ENGINEERING COLLEGE.
- ME (SPECIALIZATION- ILLUMINATION ENGINEERING), DEPT.- ELECTRICAL ENGINEERING, JADAVPUR UNIVERSITY.
- PH.D. (TECHNOLOGY), MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY (FORMERLY KNOWN AS WEST BENGAL UNIVERSITY OF TECHNOLOGY).

WORK EXPERIENCES

- ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, RAMKRISHNA MAHATO GOVT. ENGINEERING COLLEGE, PURULIA (FORMERLY PURULIA GOVT. ENGINEERING COLLEGE) FROM AUG-2018 TO TILL DATE.
- ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, NATIONAL INSTITUTE OF TECHNOLOGY MEGHALAYA, FROM AUG-2013 TO AUG-2018.
- TRAINEE OFFICER, WEST BENGAL FINANCIAL CORPORATION, FROM FEB-2012 TO AUG-2013.
- ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, SURENDRA INSTITUTE OF ENGINEERING & MANAGEMENT, SILIGURI FROM JULY-2010 TO FEB-2012.
- PROGRAMMER ANALYST TRAINEE, COGNIZANT TECHNOLOGY SOLUTIONS INDIA PVT. LTD, FROM NOV-2007 TO APR-2008.

SPECIAL ACHIVEMENTS

- JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH (J.B.N.S.T.S.) JUNIOR SCHOLARSHIP IN 2001.
- GATE EXAM QUALIFIED, DETAILED IN BELOW.

GATE YEAR	STATUS	GATE PAPER	ALL INDIA RANK	PERCENTILE	GATE SCORE
2007	Qualified	Electrical Engineering	2130	87.32 (Calculated)	338
2008	Qualified	Electrical Engineering	2596	82.88	297
2009	Qualified	Electrical Engineering	193	99.07	662
2010	Qualified	Electrical Engineering	1482	97.16 (Calculated)	529
2011	Qualified	Electrical Engineering	2504	96.55 (Calculated)	483
2012	Qualified	Electrical Engineering	644	99.41 (Calculated)	665

PROFESSIONAL MEMBERSHIP:

- INSTITUTE OF ENGINEERS (INDIA)
- IEEE

PATENT:

Patent Filed and grant is awaited: (Publication No. 43/2019 date 25/Oct/2019)

Patent with title “A Low-Cost Application-Specific Integrated Circuit (ASIC) Employed in PMLDCM Drive Fed Domestic Application” has been filed to the Department of Industrial Policy & Promotions, Government of India vide **Application No. 201931034528** of 27-Aug-2019 and grant is awaited. Inventor(s): P. Mishra, A. Banerjee, S. Gogoi and **M. Ghosh**, Applicant: National Institute of Technology, Meghalaya.

LIST OF PUBLICATIONS

-: List of Publications updated upto Jun-2022:-

List of Publications				
Summary				
International Journal/Conference Papers		ISSN	No. of Paper Published	
International Journals	SCI Expanded Indexed, UGC listed Journals	IEEE Transactions on Industrial Electronics (Impact Factor: 8.236)	Print ISSN: 0278-0046 Electronic-ISSN: 1557-9948	03
		IEEE Transactions on Circuits and Systems— II: Express Briefs (Impact Factor: 3.292)	Print ISSN: 1549-7747 Electronic ISSN: 1558-3791	01
		IEEE/ASME Transactions on Mechatronics (Impact Factor: 5.303)	Print ISSN: 1083-4435 Electronic ISSN: 1941-014X	01
		IET Power Electronics (Impact Factor: 2.641)	Electronic ISSN: 1755-4543	01
		IEEE Access (Impact Factor: 3.367)	Electronic ISSN: 2169-3536	01
		Electric Power Systems Research (Elsevier) (Impact Factor: 3.414)	Electronic ISSN: 0378-7796	01
		Chaos, Solitons & Fractals (Elsevier) (Impact Factor: 5.944)	Electronic ISSN: 0960-0779	01
		Control Engineering Practice (Elsevier) (Impact Factor: 3.475)	Electronic ISSN: 0967-0661	01
		International Journal of Circuit Theory Applications (Wiley) (Impact Factor: 2.038)	Electronic ISSN: 1097-007X	01
		International Transactions on Electrical Energy Systems (Wiley) (Impact Factor: 2.860)	Electronic ISSN: 2050-7038	01
		Electrical Engineering (Springer) (Impact Factor: 1.836)	Print ISSN: 0948-7921 Electronic ISSN: 1432-0487	01
International Conferences	IEEE Sponsored/Co-Sponsored	-----	08	

Note: Latest Impact Factor of the journals available as on the date of application are mentioned.

International Journals (SCI Expanded Indexed, UGC listed Journals):

1. **M. Ghosh**, S. Ghosh, P.K. Saha and G.K. Panda, "Semi-Analytical Dynamic Model of Permanent Magnet Direct Current Brushed Motor Considering Slotting Effect, Commutation and PWM Operated Terminal Voltage", *IEEE Transactions on Industrial Electronics*, Vol.-64, Issue No.-4, pp. 2654-2662, April, 2017. DOI: [10.1109/TIE.2016.2637303](https://doi.org/10.1109/TIE.2016.2637303)
2. **M. Ghosh**, S. Ghosh, P.K. Saha and G.K. Panda, "Sensorless Speed Estimation of Permanent Magnet DC Brushed Motor Considering the Effect of Armature Teeth-Slots and Commutation", *IET Power Electronics*, Vol.-10, Issue No.-12, pp. 1550-1555, October, 2017. DOI: [10.1049/iet-pel.2016.0634](https://doi.org/10.1049/iet-pel.2016.0634)
3. S. Ghosh, **M. Ghosh**, G.K. Panda and P.K. Saha, "Mechanical Contact-Less Computational Speed Sensing Approach of PWM Operated PMDC Brushed Motor: A Slotting-Effect and Commutation Phenomenon Incorporated Semi-Analytical Dynamic Model Based Approach", *IEEE Transactions on Circuits and Systems--II: Express Briefs*, Vol.-65, Issue No.-1, pp.-81-85, January, 2018. DOI: [10.1109/TCSII.2017.2699080](https://doi.org/10.1109/TCSII.2017.2699080)
4. **M. Ghosh**, G.K. Panda and P.K. Saha, "Analysis of Chaos and Bifurcation Due to Slotting-Effect and Commutation in a Current Discontinuous Permanent Magnet Brushed DC Motor Drive", *IEEE Transactions on Industrial Electronics*, Vol.-65, Issue No.-3, pp. 2001-2008, March, 2018. DOI: [10.1109/TIE.2017.2745446](https://doi.org/10.1109/TIE.2017.2745446)
5. **M. Ghosh**, P.K. Saha and G.K. Panda, "Hybrid Computational Mechanical Sensorless Fuzzified Technique for Speed Estimation of Permanent Magnet Direct Current Brushed Motor", *IEEE Transactions on Industrial Electronics*, Vol.-65, Issue No.-6, pp. 4565 - 4573, June, 2018. DOI: [10.1109/TIE.2017.2767553](https://doi.org/10.1109/TIE.2017.2767553)
6. S. Ghosh, **M. Ghosh** and S. Das, "Effects of Multiple Semiconducting Screens on Line Parameters and Wave Properties of Underground Cable", *IEEE Access*, Vol.- 7, pp. 169371-169384, 2019, DOI: [10.1109/ACCESS.2019.2955026](https://doi.org/10.1109/ACCESS.2019.2955026).
7. P. Mishra, A. Banerjee and **M. Ghosh**, "FPGA-Based Real-Time Implementation of Quadral-Duty Digital-PWM-Controlled Permanent Magnet BLDC Drive", *IEEE/ASME Transactions on Mechatronics*, Vol.-25, Issue No.-3, pp. 1456-1467, June 2020, DOI: [10.1109/TMECH.2020.2977859](https://doi.org/10.1109/TMECH.2020.2977859)
8. R. Chaki, **M. Ghosh**, G.K. Panda, P.K. Saha, A. Dey and A. Banerjee, "An Improved Dimmable LED Driving Scheme with Low Flicker Metrics for Low Voltage Application", *Electric Power Systems Research (Elsevier)*, Vol.-187, No.-106433, pp. 1-8, October, 2020. DOI: [10.1016/j.epsr.2020.106433](https://doi.org/10.1016/j.epsr.2020.106433)
9. **M. Ghosh**, S. Ghosh, S. Ghosh, G.K. Panda and P.K. Saha, "Dynamic model of infected population due to spreading of pandemic COVID-19 considering both intra and inter zone mobilization factors with rate of detection", *Chaos, Solitons & Fractals (Elsevier)*, Vol.-142, No.- 110377, pp. 1-10, January, 2021. DOI: [10.1016/j.chaos.2020.110377](https://doi.org/10.1016/j.chaos.2020.110377)
10. P. Mishra, A. Banerjee, **M. Ghosh**, S. Gogoi and P.K. Meher, "Implementation and validation of quadral-duty digital PWM to develop a cost-optimized ASIC for BLDC motor drive", *Control Engineering Practice (Elsevier)*, Vol.-109, No.- 104752, pp. 1-10, February, 2021. DOI: [10.1016/j.conengprac.2021.104752](https://doi.org/10.1016/j.conengprac.2021.104752)
11. P. Mishra, A. Banerjee, **M. Ghosh**, S. Gogoi and R. Dutta, "Development of a cost-effective circuit hardware architecture for brushless direct current motor driver", *International Journal of Circuit Theory Applications (Wiley)*, Vol.-49, Issue No.-7, pp. 2183-2198, July, 2021. DOI: [10.1002/cta.3011](https://doi.org/10.1002/cta.3011)
12. P. Mishra, A. Banerjee, **M. Ghosh** and C.B. Baladhandautham, "Digital Pulse Width Modulation Sampling Effect Embodied Steady-State Time-Domain Modeling of a Boost Converter Driven PMDC Brushed Motor", *International Transactions on Electrical Energy Systems (Wiley)*, Vol.-31, Issue No.-8, pp. 01-18, August, 2021. DOI: [10.1002/2050-7038.12970](https://doi.org/10.1002/2050-7038.12970)
13. S. Ghosh, B. Chitti Babu, **M. Ghosh** and S. Das, "Line constants and wave properties of cable with sheath interleaved between double semiconductor screens", *Electrical Engineering (Springer)*, Vol.-XX, Issue No.-XX, pp. XX, March, 2022. DOI: [10.1007/s00202-022-01497-5](https://doi.org/10.1007/s00202-022-01497-5)

International Conferences:

1. **M. Ghosh**, S. Ghosh, P.K. Saha and G.K. Panda, "Design and Implementation of PIC16F877A Microcontroller Based Data Acquisition System with Visual Basic Based GUI", *IEEE Sponsored 7th International Conference on Intelligent Systems, Modelling and Simulation*, Period -25-Jan-2016 to 27-Jan-2016, Place -Bangkok, Thailand, 2016. Electronic ISBN:978-1-5090-0665-6
2. B. Baruah, S. Das and **M. Ghosh**, "Optimal Placement of Protective Devices in a Distributed Power System", *IEEE INDICON 2015*, Period- 17th-20th Dec, 2015, Place -Delhi, India, 2015. Electronic ISBN:978-1-4673-7399-9
3. S. Ghosh, **M. Ghosh**, G.K. Panda and P.K. Saha, "Time Delay Compensation by Estimating Speed Error of a PMDC Motor Using Backward Arc Length Approach", *IEEE Sponsored 2016 International Conference on Intelligent Control, Power and Instrumentation (ICICPI 2016)*, Period- October 21st - 23rd, 2016, Place -Kolkata, India, 2016. Electronic ISBN:978-1-5090-2638-8
4. T.M. Rao, **M. Ghosh** and B. Halder, "Effect of Pole Placement of a Full Order State Observer in Sensorless Speed Estimation of Brushed DC Motor", *IEEE 7th Power India International Conference (PIICON), 2016*, Period- 25th-27th Nov, 2016, Place -Rajasthan, India, 2016. Electronic ISBN:978-1-4673-8962-4
5. R. Chaki, V. Anand, S. Ghosh and **M. Ghosh**, "A Comparative Analysis of Flicker Index and Modulation Depth on Few Existing Dimmable LED Drivers", *IEEE Sponsored 2nd International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE) 2018*, Period- 01st-02nd Jun, 2018, Place - Shillong, India, 2018. Electronic ISBN:978-1-5386-4769-1
6. P. Mishra, A. Banerjee and **M. Ghosh**, "Implementation of Digital PWM on Buck-Type CSI Fed BLDC Motor Drive", *IEEE Sponsored 2nd International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE) 2018*, Period- 01st-02nd Jun, 2018, Place - Shillong, India, 2018. Electronic ISBN:978-1-5386-4769-1
7. P. Mishra, A. Banerjee, H.C. Nannam and **M. Ghosh**, "A Novel Modified Digital PWM Control Technique to Reduce Speed Ripples in BLDC Motors", *IEEE 4th Southern Power Electronics Conference (SPEC) 2018*, Period- 10th-13th Dec, 2018, Place - Singapore, 2018. Electronic ISBN:978-1-5386-8257-9
8. P. Mishra, A. Banerjee and **M. Ghosh**, "FPGA-based Real-time Performance Analysis of Buck-regulator Fed Current Source Inverter", *8th IEEE India International Conference on Power Electronics (IICPE) 2018*, Period- 13th-15th Dec, 2018, Place – Jaipur, India, 2018. Electronic ISBN:978-1-5386-4996-1
