## **PROFORMA FOR BIO-DATA**

## 1. Name and full correspondence address:

Dr Balimidi Mallikarjuna,

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- 3. **Institution:** National Institute of Technology Silchar.
- 4. **Date of Birth:** 07/04/1989 (7<sup>th</sup> April 1989)
- 5. **Gender (M/F/T):** M
- 6. Category Gen/SC/ST/OBC: OBC
- 7. Whether differently abled (Yes/No): No
- 8. Academic Qualification (Undergraduate Onwards)

S.No.	Degree	Year	Subject	University/Institution	% of marks
1.	B. Tech	2010	Electrical and Electronics Engineering	JNTU Anantapuramu/JNTU ACE Pulivendula	68.69
2.	M. Tech	2014	Power and Industrial Drives/ Electrical and Electronics Engineering	JNTU Anantapuramu /JNTUCE Anantapuramu	77.27
3.	Ph.D.	2020	Electrical Engineering	National Institute of Technology Tiruchirappalli	NA

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Ph.D thesis title	Guide's Name	Institute/Organizat ion/University	Year of Award
Real-Time Synchrophasor Assisted Adaptive Relaying Methodology to Prevent Mal-Operation Under Stressed Conditions	Dr. M Jaya Bharata Reddy	National Institute of Technology Tiruchirappalli	2020

10. Work experience (in chronological order).

S.No. Positions held Name of the Institute	From	То	Pay Scale
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1	Assistant Professor	NIT Silchar	01.08.2022	Till date	75200+DA+Other Allowances
2	Assistant Professor	B.M.S. College of Engineering Bengaluru	03.12.2021	26.07.2022	21600+DA+HRA
3	Associate Professor	Vishnu Institute of Technology Bhimavaram	26.08.2019	30.07.2021	70,000/- (Basic=37,400/-, AGP=9000/-, DA=800/-, HRA=400/-)
4	Assistant Professor	BVC Engineering College Odalarevu, Amalapuram	11.06.2010	06.05.2011	9,200/- (Basic=8,000, DA=200, HRA=200)

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1.	Mentoring Peer Review	Web of Science Academy	2021
2.	Best Paper Award	ICETSGAI4.0 2019, BIT Mesra Ranchi	2019
3.	Recognition for Publishing Journal Paper in IEEE	IEEE Madras Chapter	2018/2019
4.	Outstanding Reviewer	International Journal of Electric Power and Energy Systems	2018
5.	GATE (Graduate Aptitude Test in Engineering) Scholarship	MHRD, India	2015-2019
6.	GATE	MHRD, India	2011-2014
7.	Momentum of appreciation	District Collector, Kadapa, A.P.	2004

12. Ph.D. Thesis supervision:

Sl.	Name of the	Research Area	Supervision(s)	Status
No.	Scholar			
1.	Venkataramana Ankamreddi	Enhancing Security of Cyber- Physical Systems in Smart Grid	Dr. Balimidi Mallikarjuna	On Going
2.	Mr. Tayim Stalin Singh	Protection of Power Systems	<b>Dr. Balimidi Mallikarjuna</b> (Supervisor) & Dr. Asha MA (Co-Supervisor)	On Going

13. P.G. Thesis Superised:

S. No.	Name of Candidate	Title of Dissertation	Year of award
1	Tutumoni Baruah	Design and Implementation of Numerical Relay for 100%	2025 (On
1.	(2323201)	Renewable based Power System	going)
	K T Sindhu	A Comparative Analysis of Various Controlling Techniques	
2.		for Improved Power Converter Topology in Grid Tied Fuel	2020
2.		Cell	2020
		System	

14. U.G. Thesis Supervised:

S.No.	Name of Candidate	Title of Project	Year of award
i.	Mr. Kundala Sai Varun (2113003), Ms.	Autism Spectral Disorder (ASD)	2025

	Shreya Goswami (2113093), Mr. Sri Rama (2113137), Mr. Akshat Rawat (2113147) and		(On going)
	Mr. Banoth Kranthi Kumar (2113033)		
ii.	Mr. Kuriti Chandra Sekhar (2013062), Mr. Mangamuri Rahul (2013126), Mr. Divvi Satya SriRam (2013140)	Real-Time Implementation of Wireless Charging System for Mobile Battery Charging	2024
iii.	Mr. Harsh Kumar Singh (2013016), Anup Sharma (2013157)	Enhancing of Security Standards of SCDA, WAMPAC and its Inter Communication Protocols	2024
iv	Mr. Abhijit Kalita (1913018), Mr. Bendi Raghu Sai (1913140)	A Report on System to Measure Solar Power Using Micro- Controllers	2023
v	S.V.S. Charan (17pa1a0288) P. Yezra (17pa1a0271), K. Vamsi (18pa5a0215) S. R. Ram (17PA1A0285)	Anti-Islanding Protection of a Microgrid Using DWT	2021
vi	B. K. Hemanth (17pa1a0208), B. H. K. S. Sairam (17pa1a0214) Ch. Anil Kumar (17pa1a0218) K. Ashok (17pa1a0240)	An IoT Based Smart Methodology to Monitor, Measure and Control Power Consumption of Electric Loads	2021
vii	A. B. N. V. Srikowsik (17pa5a0203) K. K. R. Gandhi (16pa1a0240) B. V. Manikanta (16pa1a0211) A. Rajesh (16pa1a0203)	A Novel Algorithm for Transmission Line Protection	2020

# 15. Publications (List of papers published in SCI Journals, in year wise descending order).

S. No	Author(s)	Title	Name of Journal	Volu me	Page	Year
1	K Jnaneswar, B Mallikarjuna, Devaraj S, Diptendu Sinha Roy M Jaya Bharata Reddy and D K Mohanta	A Real-Time DWT and Traveling Wave based Multifunctional Scheme for Transmission Line Protection Reinforcement	Electrical Engineering (SCI/SCIE/Scopu s)	103	965– 981	2021
2	B. Mallikarjuna, D. Rishabh, M. Jaya Bharata Reddy and D. K. Mohanta	Synchrophasor Sensors Assisted Novel Algorithm for Power System Protection Reinforcement and Health Monitoring	IEEE Sensors Journal (SCI/SCIE/Scopu s)	20	8213- 8222	2020
3	B. Mallikarjuna and M. Jaya Bharata Reddy	Synchrophasor Measurements based System Integrity Protection Scheme for Smart Power Grid	Journal of Control, Automation and Electrical Systems (ESCI/Scopus)	31	207- 225	2020
4	Diptak Pal, <b>B.</b> <b>Mallikarjuna</b> ,	Probabilistic study of Under-Voltage Load	IEEE Systems Journal	14 (1)	862- 869	2020

	P. Gopakumar, M. Jaya Bharata Reddy, B. K. Panigrahi, and D. K. Mohanta	Shedding Scheme to mitigate the impact of Protection System Hidden Failures	(SCI/SCIE/Scopu s)			
5	A. Dwivedi, <b>B.</b> Mallikarjuna, D. Pal, M. J. B.  Reddy, and D. K.  Mohanta	A Real-Time Synchrophasor-Based Zone-3 Supervision of Distance Relays Under Load Encroachment Condition	IEEE Systems Journal (SCI/SCIE/Scopu s)	13(4)	4227- 4235	2019
6	B. Mallikarjuna, P. Gopakumar, D. S. Roy, and M. Jaya Bharata Reddy	A Real-Time Synchronized Harmonic Phasor Measurements- based Fault Location Method for Transmission Lines	Journal of Control, Automation and Electrical Systems (ESCI/Scopus)	30(6)	1082– 1093	2019
7	Pal, D., Mallikarjuna, B., Jaya Bharata Reddy, M., and D.K. Mohanta	Analysis and Modeling of Protection System Hidden Failures and Its Impact on Power System Cascading Events	Journal of Control, Automation and Electrical Systems (ESCI/Scopus)	30(2)	277- 291	2019
8	B. Mallikarjuna, D. Chatterjee, M.Jaya Bharata Reddy and D.K Mohanta	Real-Time Wide-Area Disturbance Monitoring and Protection Methodology for EHV Transmission lines	INAE letters (Google Scholar)	3(2)	87- 106	2018
9	P.Gopakumar, <b>B. Mallikarjuna</b> ,  M. Jaya Bharata  Reddy and D.K  Mohanta	Remote Monitoring System for Real Time Detection and Classification of Transmission Line Faults in a Power Grid using PMU Measurements	Protection and Control of Modern Power Systems (SCIE/ESCI/Scop us)	3(16)	1-10	2018
10	B. Mallikarjuna, P. Shanmukesh, D. Anmol, M. Jaya Bharata Reddy and D.K Mohanta	PMU based adaptive zone settings of distance relays for protection of multiterminal transmission lines	Protection and Control of Modern Power Systems (SCIE/ESCI/Scop us)	3(12)	1-15	2018
11	P Rajaraman,N.A Sundaravaradan, B. Mallikarjuna, M.Jaya Bharata Reddy and D.K Mohanta	Robust Fault Analysis in Transmission Lines Using Synchrophasor Measurements	Protection and Control of Modern Power Systems (SCIE/ESCI/Scop us)	3(14)	1-13	2018
12	Diptak Pal, <b>B.</b> <b>Mallikarjuna</b> , R.Jayakumar	Synchrophasor Assisted Adaptive Relaying Methodology to Prevent	IEEE Sensors Journal (SCI/SCIE/Scopu	17 (23)	7713- 7722	2017

	Reddy, M. Jaya Bharata Reddy,	Zone-3 Mal-operation During Load	s)			
	and D.K.	Encroachment				
	Mohanta					
13	B. Mallikarjuna, P.V. Vardhan Varma, S. D. Samir Kumar, M. Jaya Bharata Reddy and D.K.Mohanta	An Adaptive Supervised Wide-Area Backup Protection Scheme for Transmission Lines Protection	Protection and Control of Modern Power Systems (SCIE/ESCI/Scop us)	2(22)	1-16	2017
14	N. A. Sundaravaradan, P. Rajaraman, Rounak Meyur, B. Mallikarjuna, M. Jaya Bharata Reddy and D. K. Mohanta	Real-Time Fault Analysis of Transmission Lines Using Wavelet Multi Resolution Analysis Based Frequency Domain Approach	IET Science Measurement and Technology (SCI/SCIE/Scopu s)	10(7)	693- 703	2016

16. Conferences:

S. No	Author(s)	Title	Name of Conference	Pg. No.
1	Thiyam Stalin Singh, Asha Rani M A, and <b>Balimidi</b> <b>Mallikarjuna</b>	A Novel Backup Protection to Realize Reliable Numerical Protection	2025 IEEE North-East India International Energy Conversion Conference and Exhibition (NE-IECCE 2025), July 04-06, 2025, NIT Silchar, Assam, India	1-6
2	Prashant Khare, Anurag Tripathi, Abhinav Agrawal, Anuj Agrawal, Deep Maiti, Maddikara Jaya Bharata Reddy, and Mallikarjuna Balimidi	Energy Management System for DC Microgrid: Balancing Sustainability and Economics	2025 IEEE North-East India International Energy Conversion Conference and Exhibition (NE-IECCE 2025), July 04-06, 2025, NIT Silchar, Assam, India	1-6
3	<b>Balimidi Mallikarjuna</b> , Gopakumar Pathirikkat, Kishan Dharavath	Taxonomy of Fault Analysis Methods for Protection of Transmission Lines	2024 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2024), 18 - 21 December 2024, National Institute of Technology Karnataka, Surathkal, India (WoS/SCOPUS)	1-6

4	Dharavath Kishan, <b>Mallikarjuna</b> <b>Balimidi</b> , Md Waseem Ahmad	Design of a Multi- Mode DC-DC Converter for High- Power Wireless Charging of Electric Vehicles	2024 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2024), 18 - 21 December 2024, National Institute of Technology Karnataka, Surathkal, India (WoS/SCOPUS)	1-4
5	Rahul Mangamuri, Chandra Sekhar Kuriti, Satya Sriram Divvi, <b>Balimidi</b> <b>Mallikarjuna</b> , Dharavath Kishan	Analysis of Wireless Charging System for Low-Power Appliances	2024 IEEE 5th International Conference on Sustainable Energy and Future Electric Transportation (IEEE SeFeT 2024),31st July - 03 August, 2024 (SCOPUS)	1-6
6	Madaboina Ramesh, <b>B.</b> <b>Mallikarjuna,</b> T. Rajasekar	A Novel Investigation on Single-Input Three- Output DC-DC Buck Converter For Electrical Vehicles	7th International Conference on Electrical Energy Systems (ICEES – 2021) February 11 – 13, 2021	pp. 141- 146
7	<b>B. Mallikarjuna</b> , A. Anil Kumar, M. J. B. Reddy and D. K. Mohanta	PMU based Distance Protection Methodology to Avert Malfunction due to FACTS controllers	20th National Power Systems Conference (NPSC), 14 – 16 December 2018, Tiruchirappalli, India, 2018	pp. 1-6
8	P. Gopakumar, <b>B. Mallikarjuna,</b> M. J. B. Reddy	Recent Trends on Performance Analysis of Latency on Wide Area Technologies in Smart Grids	20th National Power Systems Conference (NPSC), 14 – 16 December 2018, Tiruchirappalli, India, 2018	pp. 1-6
9	Anmol Dwivedi, <b>B. Mallikarjuna,</b> Kotni Tirumala Sai Akhil, Nibhanupudi Sai Suprabhath, M. Jaya Bharata Reddy and D.K.Mohanta	Real-Time Implementation of Phasor Measurement Unit Using NI CompactRIO	International Conference on Advances in Electrical Technology for Green Energy (ICAETGT 2017), 23 September 2017, Coimbatore, 2017	pp. 120- 126
10	<b>B.</b> Mallikarjuna, R. Meyur, D. Pal, M. J. B. Reddy and D. K. Mohanta	An adaptive secure- dependable wide-area backup protection scheme for transmission lines	IEEE International Conference on Power Electronics, Drives and Energy Systems	pp. 1-6

		using Multi-Phasor Measurement Units	(PEDES), 14 – 17, December 2016, Trivandrum, 2016	
11	<b>B.</b> Mallikarjuna, P. Gopakumar, M. J. B. Reddy and D. K. Mohanta	A case study on optimal phasor measurement unit placement for emerging Indian national smart grid	International Conference on Signal Processing, Communication, Power and Embedded System (SCOPES), 3-5 October 2016, Paralakhemundi	pp. 1-6
12	N. A. Sundaravaradan, R. Meyur, P. Rajaraman, <b>B. Mallikarjuna</b> , M. J. B. Reddy and D. K. Mohanta	A wavelet-based novel technique for detection and classification of parallel transmission line faults	International Conference on Signal Processing, Communication, Power and Embedded System (SCOPES), 3-5 October 2016, Paralakhemundi	pp. 1-6

# 17. Detail of patents:

1. P. Kayal, S. Dinesh Mohan, and **Balimidi Mallikarjuna** "Artificial Intelligence based Autism Spectral Disorder (ASD) Management System and Method Thereof" (**Published on 28/10/2022**; **Filed** - Application No: 202241059063 dated: 17/10/2023)

2.

18. Books/Reports/Chapters/General articles etc.

S.No.	Title	Author's Name	Publisher	Year of Publication
1	Stability Assessment of Power Systems with 100% Renewable Energy Sources: A MATLAB/Simulink Approach	<b>Balimidi Mallikarjuna</b> Vivekanandan S V V S N Murty Vallem	River Publishers	Under Review
2	"Enhancing the Cyber Security of Micro-Grid Using Linear Optimization Programming Technique" Optimizing Microgrid	<b>Balimidi Mallikarjuna</b> , Venkataramana Ankamreddi, Vivekanandan S	CRC Press, Taylor & Francis Group	Under Review
3	Advances in Smart Grid Automation and Industry 4.0" Select Proceedings of ICETSGAI4.0.	K Jnaneswar, Devaraj S, B Mallikarjuna, M Jaya Bharata Reddy and D K Mohanta	Springer Singapore	2021
4	Advances in Smart Grid	K T Sai Akhil, D Rishabh, N Sai	Springer	2021

Ī	Automation and Industry	Suprabhath, Kritesh P, B	Singapore	
	4.0" Select Proceedings of	Mallikarjuna, M Jaya Bharata Reddy,		
	ICETSGAI4.0.	D K Mohanta, and Diptendu Sinha Roy		

19. Projects Under taken:

Mentors	Students	Project Title	Amount	Status	Duration
		-	Sanctioned		
Dr. Balimidi Mallikarjuna	1. Mr. Ratan Boro (2013014) NIT Silchar, 2. Mr. Rishikesh Kumar Narayan Sinha (2013167), 3. Mr. Abhijit Doley (2013021), 4. Mr. Ansh Umathe (2013131): NIT Silchar 5. Mr. Ayush Kumar Mehta (EE/20/23), NIT Arunachal Pradesh	Design and Analysis of Various Protection Functions for Enhancing Power System Reliability	1.5 Lakh	Completed	1st July 2023 to 31st July 2023

### 20. Any other Information (maximum 500 words)

B. Mallikarjuna is an Assistant Professor in the Department of Electrical Engineering, NIT Silchar, Assam, India. He received the Ph.D degree from National Institute of Technology (NIT), Tiruchirappalli, India, in 2019. In 2018, he was awarded as outstanding reviewer for 2018 by International Journal of Electric Power and Energy Systems (Elsevier). Subsequently, he was recognised for publishing research work in IEEE Journals for 2018/2019. He is passionate about researching emerging fields like wide-area monitoring, control, and protection, synchrophasor technology, smart grid, substation automation, digital relaying, soft computing applications in power system, and micro grid protection. He is a Member of IEEE. He has published his research work in 14 journals, 10 conference papers and book chapters in "Advances in Smart Grid Automation and Industry 4.0" Proceedings of ICETSGAI4.0, LNEE Series, Springer Singapore. He renders voluntary reviewer services to IEEE Transaction on Instrumentation & Measurements, IEEE Transaction on Power Systems, IEEE Systems Journal, International Journal of Electric Power and Energy Systems (Elsevier) and IET Generation, Transmission and Distribution in power engineering. Recently, he was recognised as Research Supervisor or Co-Supervisor Recognition to guide students under VTU from 2022 onwards.