### **Dr DOLA GOBINDA PADHAN**

Flat No 102, Lakshmi's Majestic Plaza, Mayuri Nagar, Miyapur, Hyderabad-500049



dolap@srmist.edu.in

+91-9989765799





Time delay systems

Control Structures and Controller design

Process Identification & Auto-tuning

Control Theory Applications

AI and ML Applications

Soft Computing

**Electric Vehicles** 

UAV, UGV, UWV



# **Key Skills**

MATLAB, C, Python, R, LabVIEW

Machine Learning, Deep Learning

IoT, Artificial Intelligence

MAPLE, MATHEMATICA, LATEX



## Education

2012: Ph.D. (**Control Systems**) from **IIT, Guwahati**, 9 CGPA in Course work 2002: P.G. (Heavy Electrical Equipment) from **NIT, Bhopal**, 79.99% Marks

1999: U.G. (Electrical Engineering) from The Institution of Engineers (I) 61% Marks

2024: Executive Post Graduate Programme in **Electric Vehicle Design** from **IIT, Roorkee** 

### **Work Experience**

WORK Experience			
Position & Period	Place		
Professor (16 <sup>th</sup> January 2025- Till date)	SRMIST Delhi-NCR, Ghaziabad		
Professor (5 <sup>th</sup> August 2024-10 <sup>th</sup> January 2025)	Anurag University, Hyderabad		
Professor (17 <sup>th</sup> Dec. 2014 – 27 <sup>th</sup> July 2024)	Gokaraju Rangaraju Institute of Engineering & Technology (Autonomous), Hyderabad		
Professor (4 <sup>th</sup> Dec. 2013-16 <sup>th</sup> Dec. 2014)	Guru Nanak Institutions Technical Campus, Hyderabad		
Professor (1st June 2013-2nd Dec. 2013) Associate Professor (1st August 2008- 31st May 2013) Assistant Professor (29th August 2003-31st July 2008)	GMR Institute of Technology (Autonomous), Rajam		
Assistant Professor and Head of Department (3 <sup>rd</sup> March 2003- 28 <sup>th</sup> August 2003)	IACR Engineering College, Rayagada		

## **Certifications**

Recognized as NPTEL Stars: NPTEL Discipline (CSE) Star, NPTEL Believers, NPTEL Enthusiasts

#### **NPTEL** courses in **CSE** and allied domain = 49 credits

- Data Analytics with Python, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Deep Learning IIT Ropar, (Elite), NPTEL, Govt of India, 2024
- Introduction to Soft Computing, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Cloud Computing, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Python for Data Science, (Elite + Silver Medal), NPTEL, Govt of India, 2023
- ❖ Natural Language Processing, (Elite), NPTEL, Govt of India, 2024
- Blockchain and its Applications, (Elite), NPTEL, Govt of India, 2024
- ❖ Introduction to Machine Learning, (Elite), NPTEL, Govt of India, 2024
- Data mining, (Elite), NPTEL, Govt of India,2024
- Data Base Management System, NPTEL, Govt of India, 2024
- Machine Learning, (Elite+Topper) NPTEL, Govt of India,2024
- ❖ Data Science for Engineers, NPTEL, Govt of India,2023
- Industry 4.0 and Industrial Internet of Things (IIoT), (Elite) NPTEL, Govt of India, 2022

- Introduction to Internet of Things (IoT), (Elite + Silver Medal), NPTEL, Govt of India, 2019
- ❖ Data Science (Hands on), Kelly Technologies, Hyderabad, 2019
- ❖ Internet of Things (IoT) (Hands on), Quality Thought, Hyderabad, 2019
- Programming with Cloud IoT Platforms, Pohang University of Science and Technology (POSTECH), Republic of Korea
- \* AWS Machine Learning, Amazon Web Services
- ❖ Google Cloud Platform Fundamentals: Core Infrastructure, Google cloud
- RPA Lifecycle, Automation Anywhere
- 'C' Language, Asset International, Bhopal, 2001
- One-year Computer Course (Phase-I, Phase-II and Phase-III), Orissa University of Agriculture and Technology, Bhubaneswar, 11/11/1996 to 18/10/1997.
- Certified LabVIEW Associate Developer (CLAD certified) (Serial number: 100-316-16, valid from 18/11/2016 to 17/11/2018), National Instruments, USA
- ❖ Agile SAFe (Certified SAFe 5 Agilist Certificate Id: 87927222-3479)

#### **Research Publications**

Total number of publications = 43

Number of SCI/SCOPUS Indexed Journals = 8

Number of SCI Journals under review=2

Number of SCOPUS/Peer reviewed Conferences = 24

Number of Indian Patents (Published): 2 Number of funded Industrial Projects: 5 Number of text books published: 3

Number of Book chapters: 1

Orcid:

https://orcid.org/0000-0001-8884-4985

Scopus:

https://www.scopus.com/authid/detail.uri?authorId=36988242000

Google Scholar:

https://scholar.google.com/citations?user=2Fx80EUAAAAJ&hl=en

**Vidwan ID** 

https://vidwan.inflibnet.ac.in/profile/347345

## **SCI/Scopus/Referred Journal Publications**

- D. G. Padhan and S. Majhi, "A New Control Scheme for PID Load Frequency Controller of Single-area and Multi-area Power Systems", *ISA Transactions, Elsevier*, vol. 52, pp. 242–251, 2013. (ISSN: 0019-0578) IF: 7.3 DOI: 10.1016/j.isatra.2012.10.003 (SCI & SCOPUS Indexed), Print ISSN: 0019-0578
  Online ISSN: 1879-2022
- D. G. Padhan and S. Majhi, "Enhanced Cascade Control for a Class of Integrating Processes with Time Delay", ISA Transactions, Elsevier, vol. 52, pp. 45-55, 2013. (ISSN: 0019-0578) IF: 7.3 DOI: 10.1016/j.isatra.2012.08.004 (SCI & SCOPUS Indexed)
- D. G. Padhan and S. Majhi, "Modified Smith Predictor based Cascade Control of Unstable Time Delay Processes", ISA Transactions, Elsevier, vol-51, pp. 95-104, 2012. (ISSN: 0019- 0578) IF: 7.3 DOI: 10.1016/j.isatra.2011.08.002 (SCI & SCOPUS Indexed)
- D. G. Padhan and S. Majhi, "An Improved Parallel Cascade Control Structure for Processes with Time Delay", Journal of process control, Elsevier, vol-22, pp. 884-898, 2012. (ISSN: 0959-1524) IF: 4.2 doi:10.1016/j.jprocont.2012.03.003 (SCI & SCOPUS Indexed)
- ❖ D. G. Padhan and S. Majhi, "Modified Smith Predictor and Controller for Time Delay Processes", *IET Electronics letter*, IEEE, vol-47, No.-17, pp. 959-961, 2011. (Online ISSN 1350-911X) IF: 1.2 DOI: 10.1049/el.2011.<sup>0378</sup> (SCI & SCOPUS Indexed)
- ❖ **D.G. Padhan**, T. Suresh Kumar "Enhanced Performance of PID Load Frequency Controller for Power Systems" Indonesian Journal of Electrical Engineering and Informatics, Vol. 8, No. 2, June 2019, pp: 117-124 (SCOPUS Indexed)
- Manisha Kumari, Tavanam Venkata Rao, S. Arun Jayakar, D. Srinivas, **Dola Gobinda Padhan**, A. Kishore Reddy, P. Rahul Reddy, and Amanuel Diriba Tura, "A Beam Steering Dielectric Resonator Antenna Designed Using Rogers RO4003C Material for S-Band Applications", Hindawi, **Advances in Materials Science and Engineering**, Volume 2022, Article ID 7783967, 10 pages https://doi.org/10.1155/2022/7783967 (SCI & SCOPUS Indexed)
- Keerthi Volisetty, Dola Gobindha Padhan, Dogga Raveendhra, "Single Phase H Bridge Inverters Without Using Additional Power Electronics by Power Decoupling Strategy", High Technology Letters, Vol 27, No 10, 2021, ISSN NO: 1006-6748 (SCOPUS Indexed)

#### **SCI Journal under review**

- ❖ Dola Gobinda Padhan, Rabindra Kumar Sahu, "Electric Vehicle Modelling for Future Technology and Market Penetration Analysis", World Electric Vehicle Journal, MDPI, Revision submitted (ESCI & SCOPUS Indexed)
- Dola Gobinda Padhan, Y Sunil Kumar, "GWO based Cascaded Fractional-order PID Controller for Unstable processes with long dead time" IEEE Transactions on Control Systems Technology, Revision R2 submitted (SCI and SCOPUS Indexed)

#### **Scopus/Peer reviewed Conference Publications**

- J. Sanathana, S. Bathula, D. G. Padhan, D. S. N. M. Rao and V. V. R. Raju, "IMC Based Tuning of PID Controller for Closed Loop Control of BLDC Motor," 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), Hyderabad, India, 2024, pp. 1-5, doi: 10.1109/SEFET61574.2024.10718164.
- ❖ **Dola Gobindha Padhan,** Sai Nikhila Varma, Venkateshwari C, Marakala Divya, Suguna Manasa, B Pakkiraiah," Home Security System Based On Facial Recognition", IEEE International Conference on Sustainable Energy and Future Electric Transportation (SeFeT), 09 12 August, 2023.
- ❖ S. Sahoo, V. Mahesh, B. K. Narukullapati, I. Kasireddy, **D. G. Padhan** and D. S. Naga Malleswara Rao, "Control System Engineering through MATLAB-A Case Study on Project based Learning," *2023 2nd Edition of IEEE Delhi Section Flagship Conference (DELCON)*, Rajpura, India, 2023, pp. 1-5, doi: 10.1109/DELCON57910.2023.10127243.
- ❖ **Dola Gobindha Padhan**, Dogga Raveendhra, Satyabrata Sahoo, V. Mahesh, "Comparative Analysis between Fuzzy and PR controller in Single-Phase H bridge Inverters by Power Decoupling Strategy", 04-06 August 2022, 2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric Transportation (SeFeT), DOI: 10.1109/SeFeT55524.2022.9909082
- ❖ Nayak, P., Swetha, G., Kaushal, P., Padhan, D.G., "Cluster Formation Algorithm in WSNs to Optimize the Energy Consumption Using Self-Organizing Map", Lecture Notes in Networks and Systems, 2022, 244, pp. 11–22
- Radhika, K., Nallamekala, K.K., Venkatraman, K., Padhan, D.G., "A Novel Switched-Capacitor Based Three-phase MultiLevel Inverter Fed induction motor for Agricultural Applications" 2021 IEEE International Conference on Sustainable Energy and Future Electric Transportation, SeFet 2021
- Adapa, R.R., Nawaz, S.S., Padhan, D.G.' "Analytical Study of Magnetic Flux Density for Circular Spiral and Square Spiral Coils", 2021 International Conference on Sustainable Energy and Future Electric Transportation, SeFet 2021
- Adapa, R.R., Nawaz, S.S., Padhan, D.G., "Analytical Study of Magnetic Field Intensity for various coils shapes", 2020 IEEE India Council International Subsections Conference, INDISCON 2020
- Reddy, K.L.P.K., Padhan, D.G., "Relay Feedback Identification based Load Frequency Control and Controller Design", E3S Web of Conferences, 2020, 184, 01043
- ❖ Padhan, D.G., Nawaz, S.S., Ravikanth, P.," A Fractional Order Control Strategy for LFC via Big Bang Big Crunch & Grey Wolf Optimization Algorithms", E3S Web of Conferences, 2020, 184, 01016
- Shashidhar, V., Padhan, D.G., "A rubust fractional order PID controller for MIMO power systems", E3S Web of Conferences, 2019, 87, 01024
- Kameswari, B.S.D., Padhan, D.G., "Complimentary sensitivity function based novel cascade control structure for automatic generation control", E3S Web of Conferences, 2019, 87, 01012
- Vignesh, N.A., Bagade, S., Veeramachneni, S., Kumar, T.S., Padhan, D.G.," Design and Analysis of planar inverted Leaf antenna for WLAN applications", 2019 International Conference on Computer Communication and Informatics, ICCCI 2019
- **D.G. Padhan**, T Suresh Kumar,"Control of a Magnetic Levitation System using Cuckoo Search  $PI^{\lambda}D^{\mu}$  Controller", IEEE INDICON 2018, 16-18 December 2018. (SCOPUS Indexed)
- ❖ **D G Padhan**, Suresh Kumar, V Sreehari and N Arun Vignesh, "A Hybrid Tuning of PI<sup>λ</sup>D<sup>μ</sup> Controller for Second Order Process with Delay", IEEE International Conference on Control, Power, Communication and Computing Technologies, ICCPCCT- 2018, 23-24 March 2018. (SCOPUS Indexed)
- Suresh Kumar, D G Padhan, V Sreehari and N Arun Vignesh, "Experimental Verification of Closed Loop Speed Control of PMSM using DSP 2407", IEEE International Conference on Control, Power, Communication and Computing Technologies, ICCPCCT-2018, 23-24 March 2018. (SCOPUS Indexed)
- ❖ A Anusha, **D G Padhan**, J Praveen, "Probabilistic Power Flow Using Point Estimate Methods in Mesh and Radial Power Networks", IEEE International Conference Engineer Infinite, 13-14 March 2018. (SCOPUS Indexed)
- ❖ J Sravani, K Sudha and **D. G. Padhan**, "Design and analysis of controllers for load frequency control in an interconnected power system" in International Conference Systemics, Cybernetics and Informatics ICSCI-2017, Pentagram Research Centre, India, Avatar MedVision US, LLC, NC, USA, 09-12 March 2017.
- D. G. Padhan and B. Rajagopal Reddy, "A New Tuning Rule of Cascade Control Scheme for Processes with Time Delay" in IEEE International Conference PCCCTSG-2015, Kurnool 11-12 December 2015. (SCOPUS Indexed)

- ❖ **D.G. Padhan** and B Rajgopal Reddy, "A Simple Tuning Rule of Cascade Control Structure for Processes with Time Delay", National Conference IDCEME-2015, GRIET, Hyderabad, 21-22 August 2015.
- ❖ D. G. Padhan and B. Rajagopal Reddy, "A New Tuning Rule of Cascade Control Scheme for Processes with Time Delay" in IEEE International Conference PCCCTSG-2015, Kurnool 11-12 December 2015. (SCOPUS Indexed)
- ❖ **D.G. Padhan** and B Rajgopal Reddy, "A Simple Tuning Rule of Cascade Control Structure for Processes with Time Delay", National Conference IDCEME-2015, GRIET, Hyderabad, 21-22 August 2015.
- ❖ **D. G. Padhan** and S. Majhi, "Synthesis of PID tuning for a new parallel cascade control structure" in IFAC Conference on Advances in PID Control PID'12, Brescia, Italy, 28-30 March 2012. (SCOPUS Indexed)
- ❖ D. G. Padhan and S. Majhi, "Improved Parallel Cascade Control Structure for Time Delay Processes" IEEE INDICON 2011, BITs Pilani Hydrabad Campus, 16-18 December 2011. (SCOPUS Indexed)
- ❖ **D. G. Padhan** and S. Majhi, "An Improved Cascade Control Structure for Time Delay Processes" 35<sup>th</sup> national systems conference NSC-2011, IIT Bhubaneswar, 9-11December, 2011.
- ❖ **D. G. Padhan** and S. Majhi, "A Two-degree-of-freedom Control Scheme for Improved Performance of Unstable Delay Processes" IEEE ICECE 2010, Dhaka, Bangladesh, 18-20 December 2010. (SCOPUS Indexed)
- ❖ D. G. Padhan and S. Majhi, "A Two-degree-of-freedom Control Scheme for Integrating and Unstable Delay Processes" IEEE INDICON 2010, Jadaypur University, Kolkata, 17-19 December 2010. (SCOPUS Indexed)
- **D.G. Padhan** and S. Majhi, "Modified Smith Predictor and Controller for Stable and Unstable Processes " 4<sup>th</sup> International Conference On Computer Applications in Electrical Engineering Recent Advances, IIT Roorkee, 19-21 February 2010.
- ❖ **D. G. Padhan** and S. Majhi, "A Two-degree-of-freedom Control Scheme for Improved performance of Integrating Delay Processes" 34<sup>th</sup> national systems conference NSC-2010 ,NITK Surathkal, 10-12 December, 2010.
- ❖ **D. G. Padhan** and S. Majhi, "Modified Smith Predictor and Controller Based on GM(1,1) Model" National Conference on Electronic Technologies , NCET-2010, GEC, Goa, 16-17 April, 2010.
- ❖ D. G. Padhan, "Transient stability and power flow models of FACTS controllers" International Conference PCO-2008, Chiang Mai, Thailand, 18 20 July 2008.
- ❖ D. G. Padhan, "Optimal Bidding Strategies for Steam Turbine Generators" International Conference PSACO-2008, College of Engineering, Andhra University, Visakhapatnam, 13-15 March 2008.
- ❖ **D. G. Padhan** and N Naik, "Hazards and Risks of Nano Particles to Human Health and Environment", National Symposium on MEMS, NEMS & Nano Engineering, GMRIT, Rajam, 8<sup>th</sup> −9<sup>th</sup> August 2008.
- D. G. Padhan, "Deregulation and Regulatory Reform in the Electric Power Sector: A case study in Restructuring" National Conference, The Institution of Engineers (India), Pune, 23 24 November 2007.
- D. G. Padhan, "A reinforcement learning approach for optimal electricity supply bidding" National Conference on Recent Advances in Electrical Engineering NCRAEE-07, Vignan's Institute of Information Technology, Visakhapatnam, 9-10 March 2007.

## **Books Authored:**

- ❖ Dr H.N. Pratihari, **Dr D. G. Padhan**, "**Control System Engineering"**, Alok Publications, 1<sup>st</sup> Edition, 2018
- Dr Sathish Kumar Nagarajan, Dr Dola Gobinda Padhan, Dr Bhaskar Marapelli, "Soft Computing", Scientific International Publishing House, 1st Edition, 2023 (ISBN: 9789357575546)
- ❖ Dr Dola Gobinda Padhan, Mrs. G. Nithya, Dr. Nookala Venu, Dr. Yogesh Kumar, "Fundamentals of Artificial Intelligence: For Beginners", Scientific International Publishing House, 1<sup>st</sup> Edition, 2023 (ISBN: 9789357577243)

## **Book Chapters:**

Nayak, P., Swetha, G., Kaushal, P., **Padhan, D.G.**, "Cluster Formation Algorithm in WSNs to Optimize the Energy Consumption Using Self-Organizing Map", *Lecture Notes in Networks and Systems*, Springer 2022, 244, pp. 11–22

## **Industrial Research Projects:**

Project Title: Development and Testing of Concentrated Photovoltaic Panel for various applications

**Project Cost: Rs. 25,00,000** (Twenty-Five Lakhs Rupees)

**Duration:** 1.5 Years (November 2018 – May 2020)

Role: Principal Investigator

Consultant for: Master PCB Tech Pvt. Ltd., Gokul Plots, Kukatpally, Hyderabad

**Status:** Completed

Project Title: Development of Electric Tricycle for Physically Handicapped, Electromagnetic Analysis of Laminated Bus Bars, Electromagnetic analysis and Testing of Planar Transformers and Pot core inductors

**Project Cost: Rs. 20,00,000** (Twenty Lakhs Rupees) **Duration:** 2 Years (November 2018 – November 2020)

Role: Principal Investigator

Consultant for: Master PCB Tech Pvt. Ltd., Gokul Plots, Kukatpally, Hyderabad

**Status:** Completed

❖ Project Title: Design and Development of Wireless Power Transfer System for Multiple Loads

Project Cost: Rs. 6,00,000 (Six Lakhs Rupees)

**Duration:** 1 Years (Jan 2020-Jan 2021)

Role: Principal Investigator

Consultant for: RR Infotech, Dilsukhnagar, Hyderabad

Status: Completed

Project Title: Fault Diagnosis of Three Phase Inverter using Artificial Intelligence and Machine Learning

Project Cost: Rs. 10,15,000 (Ten Lakhs fifteen thousand Rupees Only)

**Duration:** 2 Years (July 2021 – July 2023)

Role: Co- Principal Investigator

Consultant for: InstaSine Power Technologies Private Limited, Thane West, Maharashtra

**Status:** Completed

Project Title: Design and Development analysis for Axial Load, Radial Load, Rotary Torque and Oscillation Torque

**Test Machines** 

**Project Cost: Rs. 15,00,000** (Fifteen Lakhs Rupees)

**Duration:** 1 Year (Dec 2018 – Dec 2019)

Role: Principal Investigator

Consultant for: Ample Auto Tech Private Limited, Gurgaon, Haryana

**Status:** Completed

## **Government Funded Research Projects:**

Project Title: Design and Development of Extreme Fast Charging with Thermal Management of Electrical Supply

Equipment

**Project Cost: Rs. 1.45 Crore** (One Crore Forty-Five Lakhs Rupees)

**Duration:** 3 Years

**Role:** Principal Investigator **Funding Agency:** ANRF

Status: Submitted (Project's file no:ANRF/MAHA/2024/000116/ECF)

## **Funding/Grant received to Organise STTP/FDP:**

- Received grant of **Rs. 3,00,000/-** to organise Short Term Training Program (STTP) from AICTE in the year 2020.
- \* Received grant of **Rs. 4,89,333/-** to organise Faculty Development Programme (FDP) from AICTE in the year 2020.
- Received grant of **Rs. 1,00,000/-** to organise National workshop from SERB in the year 2015.

#### **Patents**

❖ **Title of Invention:** IOT-Based Simulation of Three Phase Multilevel Inverter with Fewer Switches

**Application No.** 202341017489 A

Status: Published. (Official Journal of The Patent Office Issue No. 13/2023 Dated 31/03/2023)

Title of Invention: Optimized integrated renewable energy sources for improving power quality with power

electronic controllers

**Application No.** 202341027814 A

Status: Published. (Official Journal of The Patent Office Issue No. 21/2023 Dated 26/05/2023)

### **MoUs**

- ❖ Acted as Principal Investigator for Research Partnership and Collaboration, MoU signed between GRIET, Hyderabad and Dynotech Electricals, Mahabubnagar on 24<sup>th</sup> February 2023
- ❖ Acted as Principal Investigator for Academic, Research and Scientific cooperation, MoU signed between GRIET, Hyderabad and Adelphi Technology Pvt. Ltd, Bangalore on 6<sup>th</sup> February 2023

## **Developed Research Labs/Center of Excellence**

- ❖ Center of Excellence on Sustainable Technologies
- Center of Excellence on E-Mobility

# **Courses Taught**

Name of the Course	Level (UG/PG)	Year in which taught	Class Strength	Institute
Basic Electrical Engineering,	UG	2003	60	IACR Engineering
Signal and Systems				College, Rayagada
Network Theory/ Electrical	UG	2003, 2004,	60	GMRIT, Rajam
circuit Analysis		2005		
Signal and Systems	UG	2004, 2005	60	GMRIT, Rajam
Electrical Machines (EM-I, EM-II,	UG	2004, 2005,	60	GMRIT, Rajam
EM-III)		2006		
Control systems	UG	2005, 2007	60	GMRIT, Rajam
Digital Logic Design	UG	2005, 2006	60	GMRIT, Rajam
Power Electronics	UG	2006, 2007	60	GMRIT, Rajam
Power system operation and control	UG	2007	60	GMRIT-Rajam
Switchgear and Protection	UG	2005	60	GMRIT-Rajam
Electrical Measurement and Instrumentation	UG	2006	60	GMRIT-Rajam
Special electrical machines	PG	2008	18	GMRIT-Rajam
Digital control system	UG	2012, 2013	60	GMRIT-Rajam
Power Semiconductor Drives	UG	2014, 2016,	65, 144	GNITC-Hyderabad
		2017, 2018		GRIET-Hyderabad
Computer methods in power systems	UG	2014	60	GRIET-Hyderabad
Advanced control system	PG	2014	18	GRIET-Hyderabad
Modern Control Theory	PG	2015	18	GRIET-Hyderabad
Non-Conventional Sources of Energy	UG	2015	60	GRIET-Hyderabad
Power Electronics Control of AC Drives	PG	2016, 2017	18	GRIET-Hyderabad
Control Systems	UG	2016	72	GRIET-Hyderabad
Electric Drive Systems	PG	2018, 2019	30	GRIET-Hyderabad
Electric Drive Systems	PG	2020, 2021	18	GRIET-Hyderabad
Electronics Design	UG	2021	132	GRIET-Hyderabad

Analog Electronics	UG	2020, 2021	60	GRIET-Hyderabad
Digital Electronics	UG	2022	60	GRIET-Hyderabad
Control Systems	UG	2020, 2022	60	GRIET-Hyderabad
Research Methodology and IPR	PG	2022	18	GRIET-Hyderabad
Electric and Hybrid Vehicle	UG	2023	60	GRIET-Hyderabad
Electrical Hybrid Vehicles	PG	2023	18	GRIET-Hyderabad
Digital Control of Power Electronics and Drive System	PG	2023	12	GRIET-Hyderabad
Fundamental of Electrical Engineering	UG	2023	65	GRIET-Hyderabad
Internet of Things (IoT)	UG	2023	67	GRIET-Hyderabad
Industrial IoT/Industry 4.0	UG	2024	65	GRIET-Hyderabad
Control Systems	UG	2024	65	GRIET-Hyderabad
Programmable Logic Controller	UG	2024	70	GRIET-Hyderabad
Power Semiconductor Drives	UG	2024	71	Anurag University
Machine Modelling and Analysis	PG	2024	18	Anurag University

## **Course curriculum/Course contents Designed**

Course	Level
Control systems (at GMRIT, Rajam and GRIET, Hyderabad)	UG
Network Theory/Electrical circuit analysis (at GMRIT, Rajam and GRIET, Hyderabad)	UG
DC machines and transformers (at GMRIT, Rajam)	UG
Induction and synchronous machines (at GMRIT, Rajam)	UG
Elements of Electrical Engineering (at GMRIT, Rajam)	UG
Power Electronics Control of AC Drives (at GRIET, Hyderabad)	PG
Advanced control system (at GRIET, Hyderabad)	PG
Modern Control Theory (at GRIET, Hyderabad)	PG
Electric Drives System (at GRIET, Hyderabad)	PG
Electronics Design (at GRIET, Hyderabad)	UG

# **Scholarship, Awards and Achievements**

- Received Bharat Vidya Ratan Award from International Business Council 2018
- Ministry of Human Resource Development scholarship (Govt. of India), Fellowship for doing MTech, received from Indian Government through NIT Bhopal, India, 2000 2002 (GATE 2000)
- Ministry of Human Resource Development scholarship (Govt. of India), Fellowship for doctoral program, received from Indian Government through IIT Guwahati, India, 2008 2012.
- ❖ Best teacher award for academic excellence, commendable classroom performance and contribution to the growth of the institution given by GMR Institute of technology in the academic year 2013
- Biographic listing Marquis Who's Who in the World (31st Edition 2014)
- Own Second prize in the national level Technicians' Quiz Competition at Orissa State Centre of the Institution of Engineers (India) on 4<sup>th</sup> August 1999
- Certified LabVIEW Associate Developer (CLAD certified) (Serial number: 100-316-16, valid from 18/11/2016 to 17/11/2018) by National Instruments
- Membership grade Elevation-Senior Member IEEE, 2018
- ❖ Best Researcher Award by GRIET in the year 2021 and 2022.
- Recognized as NPTEL Stars: NPTEL Discipline (CSE) Star, NPTEL Believers, NPTEL Enthusiasts in the year 2024

#### **Thesis Guidance**

- ❖ Ph.D.- 2 (2 Ongoing)
- ❖ M. Tech. 28(completed 27, 1 Ongoing)
- ❖ UG Projects 48 (completed 46, 2 Ongoing)

#### **Experience of Short courses/Training in industries**

- Computer courses conducted by College of Engineering & Technology (CET), OUAT, Bhubaneswar from 11-11-1996 to 08-01-1997 (Phase-I), from 17-02-1997 to 28-04-1997 (Phase-II) and from 15-07-1997 to 18-10-1997 (Phase-III).
- ❖ Industrial Training at Bharat Heavy Electricals Ltd. (BHEL), Bhopal from 29-11-2000 to 22-01-2001, 20-06-2001 to 24-08-2001, 27-11-2001 to 21-01-2002.
- Courses in C Language conducted by ASSET International, Bhopal, 2001

## **Workshops/Faculty Development Programs attended**

- ❖ A one-week Workshop on 'Methods of Improving Teaching Techniques' conducted by National Institute of Technical Teachers Training & Research, Chennai at GMRIT, Rajam, from 24-11-2003 to 29-11-2003.
- ❖ A Two-Day Workshop on "English For Specific Purposes Program for Technical Teachers" organized by Department of BS&H, GMRIT during 13<sup>th</sup>-14<sup>th</sup> March, 2006
- ❖ A Two-Day Workshop on 'Recent Trends in Nanoelectronics' GMR Institute of Technology, Rajam, during 8<sup>th</sup> -9<sup>th</sup> Sep, 2006
- ❖ A five-day STTP program on "Advances in DSP" organized by Dept. of EEE & Dept. of ECE, GMRIT, Rajam from 26-03-2007 to 30-03-2007.
- ❖ A two day workshop on "GMR Values And Beliefs" at GMRIT, Rajam from 03-08-2007 to 04-08-2007.
- ❖ A two-day national workshop on "Microprocessors and Microcontrollers" at GMRIT, Rajam during 18<sup>th</sup> -19<sup>th</sup> February 2008.
- A one-week FDP on 'Guide to a Passionate Teacher' conducted by Department of Career Guidance and Counseling at GRIET, Hyderabad during 29<sup>th</sup> June-04<sup>th</sup> July 2015.
- ❖ A two-day Workshop on "TI C2000 MCU for Real-Time Control Applications" conducted by Texas Instruments India University program in association with Starcom Information Technology Limited, Bangalore at GRIET, and Hyderabad during 11<sup>th</sup> -12<sup>th</sup> August 2015.
- ❖ A two-day workshop on "IEEE Smart Tech Workshop-2015 (Smart City)" organized by IEEE Bangalore section during 25<sup>th</sup> -26<sup>th</sup> September 2015.
- ❖ A five-day FDP on "NI LabVIEW Core 1 & Core 2" conducted by National Instruments at GRIET, Hyderabad during 4-8 January 2016
- ❖ A four-week AICTE approved FDP by IIT Bombay on Use of ICT in Education for Online and Blended Learning during May 2<sup>nd</sup>, 2016 to July 10<sup>th</sup>, 2016.
- ❖ A Two Week ISTE STTP on "Electric Power System" by IIT Kharagpur during 10<sup>th</sup> July to 15<sup>th</sup> July 2017.
- One week Short Term Training Programmer through ICT mode on "Evaluating Students' Performance and Designing Question Papers", conducted by National Institute of Technical Teachers' Training and Research, Kolkata from 25 Feb 2019 to 01 Mar 2019.
- One week Short Term Training Programmer through ICT mode on "Measurement and Control for Industrial Automation", conducted by National Institute of Technical Teachers' Training and Research, Kolkata during Feb 11-15, 2019.
- One-week Faculty Development Program on "SCILAB- An Open Source Substitute for MATLAB", organized by JNTUH and Spoken Tutorial Project, IIT Bombay from 25- 30 May 2020
- ❖ One week National Level Faculty Development Program on "Ethereum Powered DAPP Deployment in Blockchain Technology" organized by Copmputer Engineering Department of Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai in association with Programming Fiesta, 27<sup>th</sup> May-31<sup>st</sup> May 2020
- ❖ 5 days Master Class on Electric Vehicle Design using MATLAB, at Pantech Prolabs India Pvt Ltd, 29<sup>th</sup> March 2021 2<sup>nd</sup> April 2021
- 5 days Master Class on Power Electronics using MATLAB, at Pantech Prolabs India Pvt Ltd, 12<sup>th</sup> April 2021 16<sup>th</sup> April 2021
- Completed National Level Hands on webinar and code-athon course on "Blockchain Technology & it's Application" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 18/5/2020
- Completed National Level Hands on webinar and code-athon course on "Python in Depth using Keras and Tensor Flow" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 16/5/2020
- Completed National Level Hands on webinar and code-athon course on "Building AI Driven Robots using RPA" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 25/5/2020
- Completed National Level Hands on webinar and code-athon course on "Scripting Machine Learning Algorithms in R" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 25/5/2020
- Completed National Level Hands on webinar and code-athon course on "Scripting Machine Learning Algorithms in R" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 25/5/2020

- Completed National Level Hands on webinar and code-athon course on "Complete Data Visualization using Tableau" conducted by Lokamanya Tilak College of Engineering & CESA-CSI in association with Programming Fiesta, 28/5/2020
- Completed NPTEL AICTE FDP on "Introduction to Internet of Things (IoT)", (Awarded Elite + Silver Medal), 12 weeks, Jul-Oct 2019
- Completed NPTEL AICTE FDP on "Introduction to Industry 4.0 and Industrial Internet of Things (IIoT)", 12 weeks, Jul-Oct 2022
- Completed NPTEL AICTE FDP on "Python for Data Science", (Awarded Elite + Silver Medal), 4 weeks, Jul-Aug 2023.
- Completed NPTEL AICTE FDP on "Data Science for Engineers", 8 weeks, Jul-Sept 2023
- Completed NPTEL AICTE FDP on Data Analytics with Python, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Completed NPTEL AICTE FDP on Deep Learning IIT Ropar, (Elite), NPTEL, Govt of India, 2024
- Completed NPTEL AICTE FDP on Introduction to Soft Computing, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Completed NPTEL AICTE FDP on Cloud Computing, (Elite + Silver Medal), NPTEL, Govt of India, 2024
- Completed NPTEL AICTE FDP on Python for Data Science, (Elite + Silver Medal), NPTEL, Govt of India, 2023
- Completed NPTEL AICTE FDP on Natural Language Processing, (Elite), NPTEL, Govt of India, 2024
- ❖ Completed NPTEL AICTE FDP on Blockchain and its Applications, (Elite), NPTEL, Govt of India,2024
- Completed NPTEL AICTE FDP on Introduction to Machine Learning, (Elite), NPTEL, Govt of India, 2024

## **Workshops/Seminars/Conferences organized**

- Organized Two week AICTE Sponsored FDP (Phase-I) on "Sustainable Technologies for Electric Transportation Systems", organized by GRIET during 14-26 June 2021
- Organized Two week AICTE Sponsored FDP (Phase-II) on "Sustainable Technologies for Electric Transportation Systems", organized by GRIET during 12-24 July 2021
- Organized One week AICTE Sponsored STTP (Phase-I) on "Automotive Technology for a Sustainable future", organized by GRIET during 7-12 September 2020
- Organized One week AICTE Sponsored STTP (Phase-II) on "Automotive Technology for a Sustainable future", organized by GRIET during 5-10 October 2020
- Organized One week AICTE Sponsored STTP (Phase-III) on "Automotive Technology for a Sustainable future", organized by GRIET during 14-19 December 2020
- Convener, International Conference on Innovation in Electrical and Electronics Engineering (ICIEEE-2014), conducted on 5-6 September 2014 at GNITC, Hyderabad
- Convener, SERB (DST) sponsored National Workshop on "Advances in Embedded Systems" conducted on 11-12 April 2015 at GNITC, Hyderabad
- Convener, International Conference on Sustainable Energy and Future Electric Transportation (SEFET-2019), conducted on 16-18 March 2019 at GRIET, Hyderabad

#### **Professional visits undertaken**

- ❖ Brescia, Italy to present the research paper in IFAC Conference on Advances in PID Control PID'12 held during 28-30 March 2012.
- Dhaka, Bangladesh to present research paper in International conference IEEE ICECE-2010 held during 18-20 December 2010.
- Chiang Mai, Thailand to present a technical paper in International Conference PCO-2008 held during 18 20 July 2008.

# **Membership of professional Societies**

- Senior Member IEEE (Member # 90624901)
- ❖ Life member of Indian Society of Technical Education (ISTE) (LM 50530)
- ❖ Associate member of IE(I) (A 525252-1)

## Referee of journals/conferences

#### Regular reviewer of the following scientific and research journals/conferences:

- ISA Transactions, Elsevier
- Control Engineering Practice, Elsevier
- IFAC Journal of process control, Elsevier
- ❖ IET Generation, Transmission & Distribution
- ❖ IEEE Access
- Ain Shams Engineering Journal, Elsevier
- Asia-Pacific Journal of Chemical Engineering
- National Academy Science Letters, Springer
- IEEE conferences

## **Internships**

- 30 days Internship on "EV Design using MATLAB Simulink" at Pantech Prolabs India Pvt Ltd, Date of Issue: 21-01-2023
- ❖ 30 days Internship on "AI Master Class" at Pantech Prolabs India Pvt Ltd in association with Andhra Pradesh State Skill Development Corporation (APSSDC), 4<sup>th</sup> Oct 2020- 5<sup>th</sup> Nov 2020.
- ❖ "AI Master Class using MATLAB" at Pantech Prolabs India Pvt Ltd, 18th Jan 2021- 1st Feb 2021
- 20 days Webinar Series on AI Master Class organized by Andhra Pradesh State Skill Development Corporation (APSSDC) and Pantech Prolabs India Pvt Ltd, 5<sup>th</sup> Oct 2020 24<sup>th</sup> Oct 2020
- ❖ 21 days Master Class on FPGA at Pantech Prolabs India Pvt Ltd, 19<sup>th</sup> April 2021 − 12<sup>th</sup> May 2021
- 30 days Master class on MATLAB Simulink at Pantech Prolabs India Pvt Ltd in association with Andhra Pradesh State Skill Development Corporation (APSSDC), 23<sup>rd</sup> Nov 2020- 22<sup>nd</sup> Dec 2020

## **Administration Experience**

- Head of the Department, Electronics and Communication Engineering, IACR Engineering College, Rayagada, Orissa. (3<sup>rd</sup> March 2003-28<sup>th</sup> August 2003)
- ❖ Time Table Coordinator for the EEE Department, GMRIT, Rajam, A.P. (June 2005-June 2007)
- Coordinator for On-line Examination conducted by JNTU Kakinada. (Jan 2006-December 2007)
- Coordinator for Web based courses, GMRIT, Rajam, A.P. (Jan 2006-December 2008)
- ❖ Observer for JNTU End exams for the years 2006, 2007 and 2008.
- Central committee member for STEPCONE 2006 and STEPCONE 2007 at GMRIT, Rajam.
- Member of Anti-ragging Committee in the campus at GMRIT, Rajam, (2004-2008)
- ❖ Internal Judge for national technical paper presentation contest (STEPCONE-13) held at GMRIT.
- Member of Board of Studies, EEE Department, GMR Institute of Technology. (2012-2013)
- ❖ Co-convener for STEPCONE 2013 at GMRIT, Rajam
- Coordinator of B.Tech. Power Engineering, at GMRIT, Rajam (2012-2013)
- Internal Judge for national level paper presentation TECHNOFEST-2014, at GNITC, Hyderabad
- Convener for International Conference ICIEEE-2014, GNITC, Hyderabad
- Coordinator for NAAC accreditation at GNITC, 2014
- Coordinator for Autonomous work at GNITC, 2014
- Departmental Coordinator for NBA (Tier-II) accreditation at GNITC, 2014
- Member of Board of Studies, EEE Department at GRIET, Hyderabad (Dec 2014 onwards)
- Coordinator for NBA (Tier-I) re-accreditation of UG program at GRIET, Hyderabad (2016)
- Coordinator for annual day celebration 2016, GRIET, Hyderabad
- Coordinator for Spiral literary club 2017, GRIET, Hyderabad
- Departmental Coordinator for IQAC, GRIET, Hyderabad (July 2016)
- Coordinator for Canteen committee 2017 onwards, GRIET, Hyderabad
- Coordinator for MTech Power Systems 2018 onwards, GRIET, Hyderabad
- Coordinator for NBA (Tier-I) re-accreditation of UG program at GRIET, Hyderabad (2023)
- R & D Coordinator at GRIET, Hyderabad
- Coordinator for Kapila Committee (Institute Level) at GRIET, Hyderabad
- ❖ Coordinator for departmental BoS (2016 onwards) at GRIET, Hyderabad
- Coordinator for UG Pink Book (OBE, Course Outcomes of subjects) at GRIET, Hyderabad
- Coordinator for UG Blue Book (OBE, CO-PO Mapping of all subjects) at GRIET, Hyderabad
- Coordinator for NAAC accreditation at GRIET, Hyderabad
- ❖ Departmental National Education Policy (**NEP**) Coordinator at GRIET, Hyderabad
- Departmental R & D Coordinator at Anurag University, Hyderabad

## **Personal Information**

Surname/ First name/Middle name: Padhan Dola Gobinda

**Permanent address:** At- Tangar Karley, P.O.- Bad Karley

Via- S. Rampur, Dist.- Sonapur, PIN-767045, Odisha, India

**Nationality:** Indian

Marital Status: Married Spouse: Nibedita

Date of Birth: 13 July 1973

**Language Proficiency:** English (Read, Write, Speak)

Hindi (Read, Write, Speak)

Oriya (Read, Write, Speak)

Deutsch (Read, Write, Speak)

Place: Ghaziabad Dr. Dola Gobinda Padhan