

# Curriculum Vitae

*Associate Professor (Electrical Engineering)  
National Institute of Technology Arunachal Pradesh  
Jote, Papum Pare, Arunachal Pradesh  
Jote-791113, India*



**Rajen Pudur, Ph.D, SMIEEE**

E- mail: [rajenpudur\[at\]nitap\[dot\]ac\[dot\]in](mailto:rajenpudur[at]nitap[dot]ac[dot]in)

[rajenpudur1977\[at\]gmail\[dot\]com](mailto:rajenpudur1977[at]gmail[dot]com)

Mobile No: +91 9436634942

Dr. Pudur completed his Bachelor of Engineering in Electrical engineering from North Gujarat University in the year 2002. He qualified in **GATE 2002** and **GATE 2003**, with a colorful score. He served the State government as Junior Engineer (Electrical) for five years; undertaking excellent commendation letter for state government in executing various practical works like- erection of HT and LT lines, electrification of buildings (SPT, MIBT, RCC so on), he also served NERIST as Guest Faculty for 3-4 years. He was awarded the **Governor Award** during Secondary school; Dr. Pudur also cleared **State Accounts Examination** conducted by government of Arunachal Pradesh. He was awarded a Ph.D. degree from NERIST in the year 2016. He has joined National Institute of Technology Arunachal Pradesh in the year 2012 since then he guided many students which were awarded with Gold medals. He published many journals and conferences papers in the field of Electrical Power system and Renewable Energy, conducted many trainings/workshops/FDPs sponsored by agencies like AICTE, NECTAR so on. Currently he is serving NIT Arunachal Pradesh as Associate Professor. His brief biodata can be seen in the following.

## Educational Qualification

Courses	Year	Board/University	Subject
Ph.D.	2016	NERIST	Electrical Engineering
M.Tech	2011	NERIST	Electrical Engineering
B.E(Elect)	2002	North Gujarat University	Electrical Engineering

## Research experience

**Duration:** November 2010 to till date

### Workshop/Training Attended/conducted:

1. One-week course in “Industrial and Commercial Power System Analysis (ICPSA)” Recommended Practices. On 1<sup>st</sup> July 2013 to 5<sup>th</sup> July 2013, at MNNIT Allahabad
2. Two days’ workshop on “Grid Integration of Renewable Energy Sources (GIRES)” at IIT Delhi, on 18<sup>th</sup> to 19<sup>th</sup> April 2015.

3. Conducted one-week in-house workshop on “Renewable source of energy: as future energy (RSEFE)” 1<sup>st</sup> Dec – 7<sup>th</sup> Dec’ 2013
4. Conducted one day workshop on “Hydro Power a Clean Power” 7<sup>th</sup> Sep’2014
5. Attended, one day workshop on “Promotion of off-grid Renewable Energy access projects in rural areas “sponsored by MNRE, Govt. of India, organized by APEDA Govt. of Arunachal Pradesh, on 20<sup>th</sup> July 2015 at Banquet hall.
6. Attended, one day workshop/meeting on “Housing for all by 2022” organized by HUPA Ministry of Housing Govt. of India, 5<sup>th</sup> May 2015, at Nirman Bhawan, New Delhi.
7. Attended, one day workshop on “R&D in Small Hydro Power Technology” at India International Centre, New Delhi, organized by AHEC, IIT Roorkee, in collaboration with MNRE, Govt. of India, on 16<sup>th</sup> Sept 2016.
8. Attended/ participated “Festival of Innovation at Rashtrapati Bhavan, President’s Secretariat and National Innovation Foundation” at West Hall Rashtrapati Bhavan Cultural Centre, President’s Estate, New Delhi, on Tuesday 10<sup>th</sup> March 2015 at 10:00 am.
9. Conducted five days training on “Machine Design using Numerical Technique in Ansys software” in associated with EDULIFE INDIA, 17<sup>th</sup> – 21<sup>st</sup> April’2017, at NIT AP.
10. Two days’ workshop on “Stability and Control of Renewable Energy based system” s (SCRE)” at IIT Delhi, on 2<sup>nd</sup> to 3<sup>rd</sup> Sep 2017.
11. Two days training/workshop on Outcome based education (OBE) on NBA at AICTE Delhi 8<sup>th</sup> -9<sup>th</sup> Feb 2018
12. Three days 4<sup>th</sup> world summit on Accreditation NBA at hotel Ashoka, Delhi on 7<sup>th</sup> -9<sup>th</sup> Sept’18.
13. Invited for screening-cum-evaluation committee for Govt. Polytechnics under Career Advance Scheme (CAS), at Itanagar on 12<sup>th</sup> Sept 2018.
14. Attended 5 (five) days short term training on “Simulation of Power Electronics converters Serving to Hydropower Plants” organized by WRDM Indian Institute of Technology, Roorkee, Uttarakhand, 20<sup>th</sup> -24<sup>th</sup> May 2019 sponsored by TEQIP –III
15. Conducted Five Days workshop on “Photography” 12<sup>th</sup> Oct – 16<sup>th</sup> Oct 2020, sponsored by AICTE Training & Learning (ATAL)Academy.
16. Conducted a week long Training on Layer poultry farming-I sponsored by NECTAR, 15<sup>th</sup> -19<sup>th</sup> Feb 2021 at NIT Arunachal Pradesh.

17. Conducted a week long Training on Layer poultry farming-II sponsored by NECTAR, 7<sup>th</sup> -12<sup>th</sup> Feb 2022 at NIT Arunachal Pradesh.
18. Conducted a week long Training on Layer poultry farming-III sponsored by NECTAR, 14<sup>th</sup> -19<sup>th</sup> Feb 2022 at NIT Arunachal Pradesh.
19. Conducted a week long Training on Fiber extraction form banana stem-I sponsored by NECTAR, 21<sup>th</sup> -25<sup>th</sup> Feb 2022 at NIT Arunachal Pradesh.
20. Conducted a week long Training on Fiber extraction form banana stem-II sponsored by NECTAR, 1<sup>st</sup> -5<sup>th</sup> March 2022 at NIT Arunachal Pradesh.
21. Conducted a week long Training on Fiber extraction form banana stem-III sponsored by NECTAR, 7<sup>th</sup> -11<sup>th</sup> March 2022 at NIT Arunachal Pradesh.
22. Conducted a week long Training on Fiber extraction form banana stem-IV sponsored by NECTAR, 14<sup>th</sup> -19<sup>th</sup> March 2022 at NIT Arunachal Pradesh.
23. Conducted one-month long Training on domestic wiring- I sponsored by NECTAR, 13<sup>th</sup> Dec 2021-12<sup>th</sup> Jan 2022 at NIT Arunachal Pradesh.
24. Attended 7 (seven) days short term training on “Emerging Trends in Energy & Power System” organized by Electrical Engineering NIT Delhi, 26<sup>th</sup> -31<sup>st</sup> July 2022.
25. Attended 7 (seven) days short term training on “Emerging Trends in Power, Energy and Control” organized by Electrical Engineering MITS Kerala, 22<sup>nd</sup> – 27<sup>th</sup> August 2022.

### **Top Post Graduation project supervised:**

<b>S/n</b>	<b>Title</b>	<b>Name of scholar</b>	<b>Remarks</b>
1.	Performance of Savonius rotor with multiple blades for hydrokinetic application	Shadab Zafar	2016
2.	Design and analysis of single basin solar still for Arunachal Pradesh.	Moloy Sameer Dutta	2016
3.	Investigation of minimum distance between two consecutive wind towers for optimal extraction of wind power	Ananya Garhwal	2016
4.	Voltage sag compensation for integrated power system using DVR	Onam Techi	2016
5.	Power quality improvement using active filters for hydropower station	Kanya Hage	2016
6.	Design of Tri-copter for surveillance using Arduino	Chetan Sharma	Gold medal

	controller	Sumit Kumar, Mohit Anand Choudhary Aman Das	project 2013
7.	Design and implementation of ELC for micro hydro power plants.	Avinash Nair Pothabathula Sai S. Prashanth Reddy Om Kesharwani Papumoni Gogoi	Gold medal project 2014
8.	Feasibility Study of Wind Farm : A case Study for Pasighat , Arunachal Pradesh	Pencil Saring	2018
9.	Simulation and Study of Solar Powered Water Pumping System Using BLDC Motor	Priyatosh Jena	2018
10.	Performance Analysis of Hybrid Hydro-Wind System Using Electronic Load Controller	Vivek Kumar Srivastava	2018
11.	Feasibility Study of Wind Farm : A case Study for Sela Pass , Arunachal Pradesh	Tashi Dondup	2018
12.	Simulation and Study of DC Micro-grid for Hydro and Solar Power Integration	Krittika Mukherjea	2018
13	Analysis of Voltage Sag Compensation using Dynamic Voltage Restorer	N.G. Sorum	2019
14	Analysis of power flow control with UPFC for grid connected renewable sources.	Pallavi Kumari	2019
15	Analysis of Savonius rotor based grid connected hydrokinetic power generation	Perwez Alam	2019
16	Modeling & Simulation of a Virtual Synchronous Machine(VSM) to Improve Power Quality through Integrated Distributed Generation	Mrinal Kanti Rajak	2020
17	Analysis of Power Quality Improvement using High Pass Filter and Low Pass Filter	Thoi Thoi Angom	2020
18	Study and Analysis of Zeta converter fed BLDC	Tilling Tabing	2020
19	Design of Three Phase, 2.5 kW Resistive Load using Nichrome & Tungsten material and testing with 2.2 kW SEIG	Jonathon Borang	2021
20	Design of Single Phase, 2.5 kW Resistive Load using Nichrome & Tungsten material and testing with 2.2 kW SEIG.	Oter Tamut	2021
21	Study of Bidirectional Converter for Electric Vehicle Application.	Mr. Biraj Borah	2022
22	Attenuation of harmonics using zig-zag transformer for off-grid system	Mr. Sooraj C	2022
23	Design of Shunt Active Filter (SAF) for harmonic contaminated micro hydro System	Mr. Jotirmoy Samanta	2022
24	Steady State analysis of two SEIGs operating in Parallel	Mr. Swaraj Sharma	2022

### Top Ph.D. pursuing:

S/n	Title	Name of scholar	Remarks
-----	-------	-----------------	---------

1.	Investigation and improvement of Power Quality in Renewable Energy based Hybrid System.	Laishram Khumanleima Chanu	Advanced stage
2.	Control and Management of Microgrid for Renewable Energy Sources	Ingudam Chitrasen Meite	Awarded
3.	Power Quality improvement at load side using Electric Spring	Tana Bida	Advanced stage
4.	SEIG Based Micro Hydro Power Generation	Samrat Chakraborty	Pursuing
5.	Grid Integration of Renewable Energy Sources	Mrinal Kanti Rajak	Pursuing
6.	Voltage & Frequency regulation of SEIG based micro hydro plant using modified ELC	Shalini Sinha	Pursuing
7.	Modified control system for improving power quality in integrated renewable sources	Jotirmoy Samanta	Pursuing
8.	Application of power electronics on distributed generation systems.	Arghya Mukherjee	Pursuing

#### Projects undertaken/proposed:

S/N	Title	Cost in Lakh	Duration	Role as PI/Co-PI	Agency
1.	Design & Implementation of test run and control of BLDC motor, using rechargeable battery.	5.0	3 years	PI	NIT AP
2.	Three-phase self-Excited Induction generator feeding single phase loads to remote area	2.0	1 year	PI	TEQIP-III, NIT AP
3.	Investigation of Micro Hydro and Wind Power off-grid Integrated System using Electronic Load Controller with Pump Storage as a Dump Load for Rural Area	29.0	3 Years	PI	DST

#### Administrative Experiences: -

Duration	Designation	Duties	Experience in Years
2004 -2007	Guest Lecturer, NERIST	Teaching	3 years
2008-2012	Junior Engineer (EE)	Field Engineer	5 years
2012-2023	Assistant Professor (EE), NIT AP	Teaching	10 years
2023- till date	Associate Professor (EE), NIT AP	Teaching	1 + Years
19.02.2012 to 15.03.2013	Scholarship Coordinator	Contact with ministry for stipends for students	~ 1 year

10.01.2013 to 24.07.2014	Chairman, Construction Committee	Construction works at NIT Yupia	~ 1 yr 6 months
2012-2021	Centre in-charge, Deputy Central-incharge CCB-12,CSAB-13,CSAB-14, CSAB-15, CSAB-16, CSAB-17, CSAB-18. CSAB-19, CSAB-20, CSAB-21	Counseling process Through AIEEE 12, JEE(Main)-13, JEE(Main)-14, JEE(Main)-15, JEE(Main)-16, JEE(Main)-17, JEE(Main)-18,,JEE (Main)-19, JEE(Main)-20, JEE (Main)-21	~ 9 years
10.01.2013 to 24.07.2014	CTO, NCC unit NIT AP	NCC activities	~ 1 yr 6 months
23.12.2013 to 13.02. 2018	HoD, EE	Looking after department of EE	~ 5 years
2023- till date	HoD, EE	Looking after department of EE	1 + year
09.01.2013 to 2014	Member, B&WC, NIT AP	Decision making for construction works	~ 1 year
13.02.18- 2019	Deputy Registrar (Admin)(i/c)	Looking after Administration	~ 7 months
13.02.18- 2022	Chief Warden	Looking after hostel management	~ 4 years
13.02.18- 2018	Security incharge	Looking after security matters	~ 5 months
2017 –2019	NBA Coordinator	NBA activities	~ 2 years
13.02.18 –till date	Chairman, HMC	Hostel management activities.	~ 4 + years
Jan 2019 – 27 August 2021	Dean (Academic & Examination)	Academic activities of institute	~ 3 Years

### Personal details:-

Full Name : - Dr. Rajen Pudur

Father's Name : -Shri Tayong Pudur

Date & Place of Birth : -06/08/1980, Aalo, West Siang Distt. Arunachal Pradesh.

Permanent Address : -C/o Tayong Pudur, Pakam-II, Aalo, West Siang Distt. Arunachal Pradesh Pin – 791001

Postal Address : - Asstt. Professor, Electrical Engineering, NIT, Arunachal Pradesh, Papum pare, Jote 791113

Category : -Scheduled Tribe

Nationality : - Indian

Language Known : English, Hindi, Assamese and Local dialect

Contact number : +91 9436634942

**Declaration:-**I do hereby declare that above mentioned information are true to the best of my knowledge.

### **List of top few publications**

#### **Journals**

1. **Rajen Pudur**, Sarsing Gao, “Savonius rotor based grid connected hydrokinetic power generation scheme”, Sustainable, Energy Grid and Network (SEGAN), **Elsevier**, 2016, Vol-5, pp- 148-155.
2. **Rajen Pudur**, Sarsing Gao, “Performance Analysis of Savonius Rotor Hydro Generation Scheme with Electronics Load Controller”, Journal of Renewable Energy, Hindawi, volume2016, pp- 1-7, doi:10.11/2016/4127619.
3. Dr. A.K Singh, Dr. **Rajen Pudur**“Modelling of single phase UPFC without DC capacitor” IJEST,vol-3. No. 5 May 2011, ISSN: 0975-5462, (P-3732-3738)
4. Ralli Sangno, P. Devchandra Singh and **Dr. Rajen Pudur**, “Reliability evaluation of a 132/33 kV HV substation” International Journal on Current Science & Technology, Vol-04, June 2016, ISSN: 2320 5636, pp-430.
5. I. Chitrasen & **Rajen Pudur**, “Analysis and Optimization of Hybrid Renewable Energy Sources: A Case Study for Litan, Manipur” Journal of Advance Research in Dynamical and Control System, **Elsevier**, Vol-12, 2020, DOI: 10.5373/JARDCS/V12SP3/20201254. pp – 200-208.
6. I. Chitrasen, **Rajen Pudur**, “Optimization of wind solar and battery hybrid renewable system using backtrack search algorithm” Indonesian Journal of Electrical Engineering and Computer Science **Elsevier** Vol. 24, No. 3, December 2021, pp. 1269~1277 ISSN: 2502-4752, DOI: 10.11591/ijeecs. v24.i3.pp1269-1277
7. I. Chitrasen, **Rajen Pudur**, “Optimization of Hybrid System for an Institute and a Hospital” Design Engineering, **Elsevier**, 2021, ISSN: 0011-9342 | Year 2021 Issue: 7 | Pages: 871-883
8. L.K.Chanu & **Rajen Pudur**, “Voltage and Frequency Regulation of Micro Hydro-Based Renewable Energy Generation”, Journal of Optoelectronics Laser, vol. 41, no. 7, pp. 1271–1289, Jul. 2022.
9. M.K. Rajak, J. Samanta, **R. Pudur**, A hardware-based novel approach for parallel operation of two differently rated SEIGs, Results in Engineering (2023), doi: <https://doi.org/10.1016/j.rineng.2022.100825>.

#### **Conference papers:**

1. Sarsing Gao, **Rajen Pudur**, ‘Harnessing hydroelectric power using Savonius rotor coupled with asynchronous generator connected to grid”, IEEE, international Conference at Hong Kong, APPEEC-2013,(p-1-4)
2. Bikash Sah, **Rajen Pudur** ‘Study of unsymmetrical faults in power system using Morlet wavelet technique” IEEE, SCEECS-2014, March 1-4, Bhopal, India.

3. **Dr. Rajen Pudur**, et.al “Wireless Power Transmission: A Survey”, IEEE, International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014) May-09-11, 2014, Jaipur India.
4. **Rajen Pudur**, Sarsing Gao “Performance analysis of Savonius rotor on different aspect ratio for hydropower generation” ICPDEN, 10th – 11th Jan 2015 IEEE, NERIST
5. **Rajen Pudur**, Sarsing Gao “Single phase power for remote area using Savonius rotor based hydropower generation” IEEE, International Conference on Energy, Power and Environment (ICEPE) 12-13, June 2015 NIT Meghalaya.
6. **Dr. Rajen Pudur**, Vivak Kumar Srivastava, “Performance Study of Electronic Load Controller for integrated Renewable Sources” 2<sup>nd</sup> International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), IEEE, 2018, pp-1-6.
7. P.Jena, **Rajen Pudur**, T.Kamsi P.Saring Extremum Seeking Control Maximum Power Point Tracking Applied to Solar PV Water Pumping System Using BLDCMotor, IEEE, 2019 International Conference on Computer, Electrical & Communication Engineering (ICCECE),18-19 Jan2019, 10.1109/ICCECE44727.2019.9001890
8. **Rajen Pudur** et. al “ANN Based MPPT Applied To Solar Powered Water Pumping Sy Techno-Economic Analysis of Grid Connected Integrated stem Using BLDC Motor” IEEE International Conference on Sustainable EnergyTechnologies and Systems (ICSETS),25-Feb 2019,10.1109/ICSETS.2019.8744804
9. S.Chakraborty, **Rajen Pudur**, “Supply of Single-Phase Power for Rural Area using Three-Phase Self-Excited Induction Generator”, 2021 IEEE Asian Conference on Innovation in Technology (ASIANCON) Pune, India., 28-29 Aug2021, 10.1109/ASIANCON51346.2021.9545057
10. I. Chitrasen, **Rajen Pudur**, “Optimize Model of Hybrid Renewable System with Minimum Power Fluctuation Rate”, 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA), 17-19 Dec 2021, 10.1109/ICCCA52192.2021.9666352
11. S.Chakraborty, **Rajen Pudur**, “Hardware Investigation of a New Phase Balancing Topology for Supplying Single-Phase Loads using Three-Phase SEIG”, 2022 IEEE Sustainable Power and Energy Conference (iSPEC) Perth, Australia, 04-07 December, Doi 10.1109/iSPEC54162.2022.10033026
12. S.Chakraborty, **Rajen Pudur**, “A Novel Balancing Operation Topology for Single-Phase Supply to Remote Locations from Three Phase SEIG”, 2022 IEEE 19th India Council International Conference (INDICON) Kochi, India, 16 February 2022, Doi 10.1109/INDICON56171.2022.10040112
13. L. Chanu, **Rajen Pudur**, “Real-Time Simulation of Frequency Control of 2.2 kW SEIG using Generalized Impedance Controller”, 2022 IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC) 15-17 December 2022 Gunupur, Odisha, India, Doi 10.1109/iSSSC56467.2022.10051306
14. S. Sinha, M.K. Rajak, **Rajen Pudur**, “Experimental Investigation of Voltage Regulation Using ELC for Two Self-Excited Induction Generators Connected in Parallel”, 2023 5th International Conference on Energy, Power and Environment: Towards Flexible Green Energy Technologies (ICEPE) 15-17 June 2023, Shillong, India, Doi 10.1109/ICEPE57949.2023.10201555



15. J. Samanta, **Rajen Pudur**, “Comparison of p-q and d-q Theory for Shunt Active Power Filter”, 2022 IEEE International Power and Renewable Energy Conference (IPRECON) 16-18 December 2022, Kollam, India, Doi 10.1109/IPRECON55716.2022.10059658

**Book Chapter:**

1. **Rajen Pudur**, Sarsing Gao “Savonius rotor based hydropower generation” International Symposium on AMETI 2014 (p 104 – 111), 6th -8th Dec 2014, ISBN 978-93-83842-96-4, NERIST
2. Moloy S. Dutta, **Dr. Rajen Pudur** “A study on the techniques used for productivity enhancement of solar stills” Computer, Electronics and Electrical Engineering (CEE), 2<sup>nd</sup> Research Summit, 3<sup>rd</sup> – 4<sup>th</sup> June 2016, Vol-1, ISBN 978-93-85777-69-1, pp, 214-221, Yupia, NIT AP
3. Ananya Garjwal, **Dr. Rajen Pudur** “A study on optimal distance between two consecutive wind towers for maximum power extraction” Computer, Electronics

- and Electrical Engineering (CEE), 2<sup>nd</sup> Research Summit, 3<sup>rd</sup> – 4<sup>th</sup> June 2016, Vol-1, ISBN 978-93-85777-69-1, pp, 222-229, Yupia, NIT AP
4. **Dr. Rajen Pudur**, Ralli Sangno, K. Paul “Performance Analysis of Micro Hydropower Plant with Electronic Load Controller” Computer, Electronics and Electrical Engineering (CEE), 2<sup>nd</sup> Research Summit, 3<sup>rd</sup> – 4<sup>th</sup> June 2016, Vol-1, ISBN 978-93-85777-69-1, pp, 230-239, Yupia, NIT AP
  5. OnamTechi, Kanya Hage, Dr. **Rajen Pudur** “A study on load side control for micro hydro plants using electronic load controller” Computer, Electronics and Electrical Engineering (CEE), 2<sup>nd</sup> Research Summit, 3<sup>rd</sup> – 4<sup>th</sup> June 2016, Vol-1, ISBN 978-93-85777-69-1, pp, 240-249, Yupia, NIT AP.
  6. Shadab Zafar, Dr. **Rajen Pudur** “Study on different shapes and sizes of solar still for high efficiency: a review” Computer, Electronics and Electrical Engineering (CEE), 2<sup>nd</sup> Research Summit, 3<sup>rd</sup> – 4<sup>th</sup> June 2016, Vol-1, ISBN 978-93-85777-69-1, pp, 250-255, Yupia, NIT AP
  7. Samrat Chakraborty, **Dr Rajen Pudur**, “Techno-Economic Analysis of Grid Connected Integrated Energy System for most Populated City on Earth: A case study in Gurugram , ISBN:978-81-942561-2-0, India” International Conference on Impact of Changing Energy Mix in Power Sector (ICIEMPS -2019), West Bengal, 23rd – 24th Nov’ 2019.
  8. **Rajen Pudur** et al., “Mitigation of Power Fluctuations in UPFC based Network” International conference on Electronics System & Intelligent Computing (ESIC 2020) **Springer**, pp 407-418, [https://doi.org/10.1007/978-981-15-7031-5\\_39](https://doi.org/10.1007/978-981-15-7031-5_39), Print ISBN: 978-981-15-7030-8, online ISBN: 978-981-15-7031-5
  9. **Rajen Pudur**, Mrinal K. R, S. Zafar, “Analysis of Savonius Rotor with Multiple Blades for Hydrokinetic Application”, Advance in Thermo-fluids and Renewable Energy NIT Arunachal Pradesh, Yupia, India November 26 – 28, 2020, ISBN:978-981-16-3496-3 Paper No. TFRE20/ 046
  10. **Rajen Pudur**, B. Datta, “Speed control of PMSLDC motor using rotor position rotor speed PWM technique”, Advance in Thermo-fluids and Renewable Energy NIT Arunachal Pradesh, Yupia, India November 26 – 28, 2020, ISBN:978-981-16-3496-3 Paper No. TFRE20/ 041