Dr. Atul Gandhi

Tel: +919462241388

E-mail: <u>atulgandhi1987@gmail.com</u> atul.gandhi@sangamuniversity.ac.in

To learn, grow and make my mark as a part of decision-making body in a value driven organization

ACADEMIC

- **Ph.D**. completed in Electrical Engineering from Sangam University, Bhilwara in February 2023.
- **M.Tech.** in Power system from Rajasthan Technical University, Kota 66.86%- May 2013.
- **B.E.** in Electrical Engineering from University of Rajasthan, Jaipur 68.49% August 2008.
- HSC. in Science Math from RBSE, Ajmer 59.23% June 2004.
- SSC. from RBSE, Ajmer 60.17% June 2002.

EXPERIENCE

- Teaching experience of 3 year 9 month in "ITM", Bhilwara from 02th Aug 2008 to 15 April 2012.
- Teaching Experience as an Assistant professor in "Charted Institute of Technology", Abu road from 16/04/12 to 07/08/2012.
- Teaching Experience of 2 year 6 month as an Assistant professor in "Techno India NJR Institute of technology", Udaipur from 8/08/12 to 31/1/2015.
- Teaching Experience as an Assistant professor in Electrical Engineering of School of Engineering and Technology, "Sangam University", Bhilwara from 02/02/15 to till date.

IT SKIILS

- Office Tools : MS OS-win-11/win-10/win-7/XP/Vista/2000/98, MS Office, Internet.
- Software Skills : MATLAB, P-Spice, PLC-SCADA, PSCAD, Arduino, Circuit maker, AutoCAD, Power World Simulator.

EXTRA CARRICULAR ACTIVITIES

- Gate-2013 score card with 95.63 percentile.
- PH.D. thesis completed on "Smart Monitoring and Implementation of Control Unit for Photovoltaic System".
- Make a M.Tech. Project on "Evaluating the Feasibility of Artificial Intelligence Technique in Improving Automatic Generation Control".
- Give a M.Tech. Presentation on seminar topic "Effect of direct current in power transformer".
- Designed two B.Tech. Projects on "Load Monitoring" and "Load Flow Analysis".
- Give a B.Tech. Presentation on seminar topic "Transient Stability Including Series Shunt Compensators & FACTS".
- Completed a 30 days Practical Training at "GRID SUB STATION HEERAPURA, JAIPUR" in 2006.
- Completed a 45 days Practical Training at "SANGAM SPINEERS PVT. LMT. BHILWARA" in 2007.
- Two-time Winner in College Chess Competition 2006 & 2007.
- Took part in state level inter college chess tournament organized by Rajasthan university in 2006.
- First prize in Akhil Bhartiya Gandhi general knowledge exam held by Swadhiya munch mandasaur(M.P.).
- Managed, coordinated and participated various events at school and college level.
- Visit to College students in many companies like Secure meter, 400KV & 220KV GSS, Transformer manufacturing company, Thermal power plant, Panel designing company, spinning mill etc.
- Coordinator of "M.Tech Course" from 2018 in Sangam University, Bhilwara.
- Coordinator and faculty of "PLC-SCADA-1.5 month certificate course" from 2016 to till date.
- Got Best Faculty Award in the department at university level in 2019.
- Head of electrical engineering department at Sangam University from july, 2021 to till date.
- Many events organized and Examination & TPO team member in college/university as a faculty.
- A NPTEL online Certification course on "ADVANCED LINEAR CONTINUOUS CONTROL SYSTEM: APPLICATIONS WITH MATLAB PROGRAMMING AND SIMULINK", by IIT Roorkee from 27 august to 24 October 2018.

RESEARCH PAPER

- A paper presented on "Improved Stability Analysis of an Indirect Vector Controlled 3-Ph. Induction Motor by Fuzzy Logic Based Controller" in national conference "REEES-2010" on 10th -11th September 2010.
- A paper presented on "A fuzzy logic based SSSC controller for performance improvement" in national conference "ETREEE-2012" at ITM, Bhilwara on 25th -26th February 2011.
- A paper submitted in national seminar on "Power Generation from Renewable Energy Sources" at CTAE, Udaipur on 2nd -3rd February 2012.
- A paper presented on "Feasibility of Fuzzy Logic Technique in Improving Automatic Generation Control of an Interconnected Hydro-thermal Power System" in national conference "EREECON-2013" at TINJRIT, Udaipur on 23rd -24th February 2013.
- A paper presented on "Wireless Power Theft Monitoring System" in national conference "Emerging trend for sustainable development in engineering and technology", at SS college of engineering, udaipur on 30-31 January, 2014.
- A paper presented on "Case Study: Nanotechnology Application in the New Energy Generation Mechanism" in national conference "Emerging trend for sustainable development in engineering and technology", at SS college of engineering, Udaipur on 30-31 January, 2014.
- A Paper Published on "Evaluation of artificial intelligence technique in improving automatic generation control", at international journal of advance engineering and research development (IJAERD) on Aug-2017.
- A paper presented on "**Bladeless windmill**" in national conference "Design aspect, operation and control of smart grids", at SKIT, jaipur on 27-28 October, 2017. 28 October, 2017.
- A paper presented on "Bladeless wind power generation: an independent source for rural electrification" in international conference "Coping Change: Through Innovation and Value Creation for Society" at Sangam university, Bhilwara on 21-22 December, 2017.
- A paper presented on "**Case Study of solar and wind hybrid energy system for economic power generation**" in national conference "Recent innovation and trends in engineering and technology", at Sangam University, Bhilwara from 24-25 December, 2018.
- A Paper published on "Solar Panel Highways have Embedded Led Lights and Thermocouple Technology: A Case Study", in "International Journal of Research and Analytical Reviews (IJRAR)" on FEB-2019.
- A Paper published on "Wind Power Generation System for Rural Places", in "International Journal of Research and Analytical Reviews (IJRAR)" on FEB-2019.
 A Paper presented on "Systematic Investigation of Photovoltaic System for Suitable Energy
- A Paper presented on "Systematic Investigation of Photovoltaic System for Suitable Energy Generation", in International Conference On "Engineering Optimization and Data Science" at SKIT, Jaipur on 11-12 October, 2019.
- A Paper published on "Analysis and Assessment of MPPT for Solar PV System: A Review", in "Journal of Xidian University" in vol-14, issue -06, 2020.
- A Paper presented on "Control Strategies for Maximum Power Point Tracking Techniques for Solar PV System" in "International Conference of Analytical and Interdisciplinary Research" at Sangam University, bhilwara on 5-6 February, 2021.
- A Paper presented on "**Utilization of energy generation by solar photovoltaic when grid is at off condition**" in "International Conference on Intelligent Robotics, Mechatronics and Automation Systems" at Vellore Institute of Technology, Chennai on 26-27 March, 2021.
- A Paper published on, "Utilization of Solar Photovoltaic Energy Generation When Grid is at Shut down Condition", UGC Care Group–I Journal on Anvesak Vol. 52, No. 09 (I),ISSN: 0378-4568, July-Dec, 2022.
- A Paper presented on **"Efficiency energy generation of Microgrid from solar power plant"** in "International Conference of Analytical and Interdisciplinary Research(ICAIR-2022)" at Sangam University, bhilwara on 6-8 October, 2022.
- A Paper presented on, "Utilization of Solar Photovoltaic Energy Generation When Grid is at Shut down Condition", in "International Conference of Analytical and Interdisciplinary Research(ICAIR-2022)" at Sangam University, bhilwara on 6-8 October, 2022.
- A Paper published on, **"Optimization of operation, maintenance and performance issue in PV array by smart monitoring for green energy"**, Advanced Engineering Science, Vol. 54, Issue No. 02, and ISSN: 2096-3246, Nov, 2022.
- A Paper presented on, "Development of Machine learning Based Smart Irrigation System", in "International Conference of Analytical and Interdisciplinary Research(ICAIR-2025)" at Sangam University, bhilwara on 10th to 11th March, 2025.

PATENT

• A certified patent design and registered to "**INDUCTIVE ANGLE ENCODER**" of Num. 336979-001 at patent office, Kolkata on 30/12/2020.

WORKSHOP, SEMINAR, CONFERENCE & INTERNSHIP ATTENDED

• A national workshop on "Fundamental of PSCAD and General Application", organized by Nayak power system at TINJRIT, Udaipur from 12-14 April 2013.

- Two week ISTE STTP workshop on "Analog Electronics", conducted by IIT Kharagpur from 4-14 June 2013.
- A National workshop attends on "**Distribution Generation and Restructuring of Power Systems**", organized by CTAE, Udaipur on 30-31 August, 2013.
- Two week ISTE STTP workshop on "Signal and Systems", conducted by IIT Kharagpur from 2-12 January 2014.
- A short term training program on "**Emerging Trends in Industrial Automation and Control**", conducted by EED, MNIT, Jaipur on 1-4 April, 2016.
- A FDP on "**Teaching skills and research methodology**" in Sangam university from 5-7 January 2017.
- A workshop on "**Remote sensing and GIS applications in carbon forestry**", conducted by ISRO from 16 Feb 2017 to 10 march 2017.
- Two week ISTE STTP workshop on "**Electrical power system**", conducted by IIT Kharagpur from 10-15 June 2017.
- One month FDP on "Foundation program in ICT for Education", conducted by IIT Bombay from 03 August to 07 September 2017.
- One month FDP on "Pedagogy for Online and Blended Teaching Learning Process", conducted by IIT Bombay from 14 september2017 to 12 October 2017.
- Two days workshop session on "**Internet of Things**", conducted by SkillIT India on behalf of SkillThon'18 in an association with e-Cell **IIT Guwahati** from 06-07 September, 2017.
- A two days International seminar on "Multidisciplinary challenges and opportunities in smart nano-grids and V2G", organized by GITS, Udaipur on 21-22 April 2018.
- Two days Hands-on training session on **"MATLAB"**, organized by Sofcon India Pvt. Ltd. from 14-15 September, 2018.
- Two week short term training program through ICT Mode on "PROBLEM BASED LEARNING", conducted by NITTTR, Kolkata from 20-31 May, 2019.
- One day workshop session on "NPTEL AWARENESS WORKSHOP", organized by IIT, kanpur. on 17 October, 2019.
- A Six days training program on "**POWER SYSTEM OPTIMIZATION USING GAMS**", organized by RIT, Rajaramnagar in association with IEEE Bombay section, from 11th to 16th May, 2020.
- One Day hands on training on "DEEP LEARNING WITH MATLAB", conducted by CIT-TLC in association with Math works, on 26 may, 2020.
- A Five days training program on "**ELECTRIC VEHICLE**", organized by RIT, Rajaramnagar in association with IEEE Bombay section, from 27th to 31th May, 2020.
- 3 days online workshop on "**Education 4.0-Season II**" organized by IQAC, Atharva College of Engineering held on 28th 30th May 2020.
- One month online internship in "SOLAR PHOTO VOLTAIC (PV) INSTALLATION & MAINTENANCE" from 01.07.2020 to 30.07.2020 by MSME-TECHNOLOGY DEVELOPMENT CENTRE (PPDC).
- A Five Days Online Faculty Development Program on "**RESEARCH IN ENGINEERING A WAY FORWARD**" conducted on 6 to 10 July, 2020 at A. P. Shah Institute of Technology, Thane.
- One Week Short Term Training Programme on "IMAGE PROCESSING AND DATA SCIENCE WITH MATLAB (IP&DSWM 2020)", organized by Government College of Engineering, Aurangabad, under Technical Education Quality Improvement Programme (TEQIP- III), during 07th July to11th July 2020.
- Attended 6th students' conference on "**Engineering and Systems''** organized by MANIT, Allahabad Prayagraj during 10-12 july, 2020.
- A Course Completion Certificate of "MATLAB Onramp" has successfully completed 100% of the self-paced training course on 11/07/2020.
- A Course Completion Certificate of "Machine Learning Onramp" as successfully completed 100% of the selfpaced training course on 13/07/2020.
- A Course Completion Certificate of "**Deep Learning Onramp**" as successfully completed 100% of the self-paced training course on 13/07/2020.
- A AICTE sponsored one week Short Term Training Program on "POWER ELECTRONICS BASED DRIVES AND CONTROL" held during 03/08/2020 to 08/08/2020 organized by Prof. Ram Meghe College of Engineering and Management, Badnera-Amravati, Maharashtra.
- A Faculty Development Program on "RECENT TRENDS IN ELECTRICAL ENGINEERING & SOFT COMPUTING APPLICATIONS IN POWER SYSTEMS" held from 25/08/2020 to 29/08/2020 at "Shrinathji Institute of Technology & Engineering, Nathdwara ".
- A short course on "Learn to Design your own Solar Home System" by Energy Swaraj Foundation in association with SVPM'S College of Engineering, Malegaon(Bk), Baramati in August 2020.

- One week Faculty Development Program on "**Renewable Integration, Challenges & Opportunities**" held from 01/09/2020 to 05/09/2020 at Vedant College of Engineering and Technology, bundi .
- One week faculty Development Program on "Emerging trends in power electronics and power system" held from 07/09/2020 to 11/09/2020 at OP Jindal university, Raigarh.
- One week Faculty Development Program on "Green Energy: The Energy of Future (GEEF-2020)" held from 07/09/2020 to 11/09/2020 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A AICTE Sponsored One Week Online Short Term Training Program (STTP), Slot-2, on "Recent Advances in Micro Electro Mechanical Systems (MEMS), Mechatronics and Their Applications for Future Challenges" from 21-09-2020 to 26-09-2020, organized by Mahatma Gandhi Institute of Technology, Hyderabad.
- A three days FDP on "Advance Microgrids, Smart Renewable & Distributed Energy System", held from 24/09/2020 to 26/09/2020 at "Shrinathji Institute of Technology & Engineering, Nathdwara".
- Attended 2nd International Conference on "Artificial Intelligence and Speech Technology (AIST-2020)" organized by Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi held on 19th -20th November, 2020.
- A workshop on "Basics of AC-DC Converters: Rectifiers", organized by Skill Lync on 23 November 2020.
- A short term training program on "**Solar PV and Storage Systems**" conducted by deptartment of electrical and electronics engineering, JSSATE, Noida from 7th to 12th December, 2020.
- A faculty development program on "**Recent Innovations & Technologies in Electrical Engineering**" held at "Engineering College, Jhalawar" from 04/01/2021 to 08/01/2021.
- A faculty development program on "Arduino and PLC Based Automation in thermal, Production and Automobile Field" held at "Shrinathji Institute of Technology & Engineering, Nathdwara" from 19/01/2021 to 23/01/2021.
- A faculty development program on "Writing and Publishing Research Papers" organized by "GHS-IMR and Sangam university" from 28/06/2021 to 04/07/2021.
- A faculty development program on **"ICT Tools for Effective Teaching Learning"**, organized by Internal Quality Assurance Cell [IQAC], Sangam University, Bhilwara from 26th July to 2nd August 2021.
- A faculty development program on "Power System Design Simulation and Analysis using DIgSILENT PowerFactory Software", organized by DIgSILENT GmbH, Germany in association with M/s DELLSOFT Technologies Pvt. Ltd. New Delhi from july 27 to 28, 2021.
- A faculty development program on **"IoT with Smart City"**, organized by AICTE Training And Learning (ATAL) Academy, Government Polytechnic Daman from 13th to 17th September 2021.
- A Faculty Development Programme on "Techno-Economic Assessment of Flexibility Competency in Deregulated Power System (TEAFCDPS-2021)" held on September 20 - 24, 2021 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A Refresher Program on "Recent Trends in Robotics and Automation" organized by Department of Electronics and Communication Engineering and SKIT-ISTE student chapter, Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT, M & G), Jaipur from Janurary 5 to11, 2022.
- A 30 Days master class on "EV Design" at Pentech e Learning PVT LTD. From 2-2-2022 to 3-3-2022.
- An one week Short Term Training Program on "Writing and Publishing of Quality Research Articles and Ethics of Research" held from 21/02/2022 to 25/02/2022 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A Workshop on **"Solar PV Systems"** organized by JK Lakshmipat University Jaipur in collaboration with WAAREE Energies Ltd. on March 15, 2022.
- AICTE sponsored one week Faculty Development Program (FDP) on "Management of Intellectual Property Uncertainty in Designing and Manufacturing for Electric Vehicle Systems" organized by Electrical Engineering Department, National Institute of Technology Manipur, held during 21st-25th Feb. 2022.
- A Faculty Development Programme on **"Outcome based Education & its Implementation"** organized by IQAC at Sangam University, Bhilwara on 12 & 13 April, 2022.
- A national-level workshop on the topic "Challenges before HEI in remote areas for achieving Quality Improvement through Assessment & Accreditation process" in Sangam University on November 24-25, 2022.
- One week national high-end workshop on "Advance Research Tools Application in Renewable Energy", organized by MANIT, Bhopal from 5th to 11th December 2022.
- One Week Virtual Faculty Development program on "Operation and Control of Modern Power System" Under RIT-IEEE Student Branch & RIT-CTL, Organized by Department of Electrical Engineering, RIT during 5th to 10th, February, 2024.

- One Week online Short Term Training Program (STTP) on "Emerging Trends on Control and Automation at Present Scenario" organized by Department of Electrical Engineering, Dream Institute of Technology, Kolkata from 09.05.2024 to 15.05.2024.
- 21 Days online Master class Program on "Electrical Vehicle Design using MATLAB" organized by Pantech Elearning in association with I-Stem from 29.05.2024 to 20.06.2024.
- 10 Days online workshop on "NEP 2020 Orientation & Sensitization Programme" under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by Teaching Learning Centre, Indian Institute of Technology (BHU) Varanasi from 08-17 July, 2024.
- 9 Days online workshop on "NEP 2020 Orientation & Sensitization Programme" under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by Malaviya Mission Teacher Training Centre, Devi Ahilya Vishwavidyalaya, Indore (M.P) from 20-02-2025 to 28-02-2025.
- Two days National symposium on "Intellectual Property Rights(IPR) Patentes and Design Filling", jointly organized by research and development cell and school of basic and applied science, Sangam University, Bhilwara From March 28-29, 2025.
- One day workshop on "Mastering Journal Exploration with J-Gate for Academic research Success" by Information publishing Ltd. on 15 April, 2025.

WEBINAR

- TATA Capability development certificate on "Instrument and Control System", "Power system earthing", "PLCs" and "Machine Learning" in April 2020.
- One webinar on "NAAC Accredation Management System", by INPODS, on 27/05/2020.
- One day live webinar on "**Impact of Covid-19 on Indian culture**" on 6th June, 2020.
- The International Webinar Series "ERUDITE TALK Season 2" on "Power Electronic Technologies for Fuel Cell-Based Hybrid Energy Systems" organized under IEEE Robotics and Automation Society of St.Joseph's College of Engineering on 13/07/2020.
- A webinar on "**Evolution of Modern Power Systems and it's challenges**" by St. Joseph College of Engineering, Chennai and St. Mother Theresa Engineering College, Vagaikulam, Tuticorin on 15/07/2020.
- A Webinar on "**PV Array Fed motor Drive using multilevel inverter**", organized by CIET, Guntur, AP on 27/07/2020.
- The Webinar on "Future scope and Applications of Artificial Intelligence", organized by the Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore on 30.07.2020.
- The Training program on "Job Opportunity and carrier with embedded systems" by Don bosco institute of technology, Bengaluru, on 4/08/2020
- The Training program on "**Product Based precautions**" by Don bosco institute of technology, Bengaluru, on 4/08/2020.
- The Training program on "**Real time Embedded Systems**" by Don bosco institute of technology, Bengaluru, on 6/08/2020.
- The Training program on "ML and its application in oil and gas industry" by Don bosco institute of technology, Bengaluru, on 6/08/2020.
- The Training program on "Artificial Intelligence and Autonomous Vehicle" by Don bosco institute of technology, Bengaluru, on 7/08/2020.
- The Training program on "**Tips and Tricks to Learn Java**" by Don bosco institute of technology, Bengaluru, on 7/08/2020.
- A Webinar on "New World of work", organized by Elets digital learning magazine and Harappa education on 12/08/2020.
- The Webinar on "Automation using Programmable Logic Controller" organized by Hindusthan Institute of Technology, Coimbatore on 18/08/2020.
- An Online webinar on **"Trace Gases in Atmosphere"** organized by school of basic science, Sangam university, Bhilwara on 24/12/2020.
- An Online webinar on "Multilevel Inverter for PV Application" organized by department of electrical and electronics engineering, CIET Guntur, A.P. on 02/08/2021.
- A webinar on "Multidomain Modeling with Simscape using MATLAB" by Mathwork on 11 october, 2022.
- A webinar on "Meet the Editor: Publishing Research in Material Science and Engineering" by Taylor and Francis Group on 23 november 2023.
- A webinar on "Smart & Efficient Solutions for Air Purifiers and Ceiling Fans" by Electronics for U on 25th July 2024.

 A webinar on "Fostering Innovation and Entrepreneurship Culture in Higher Education Institutes" by RIT, Sakharale, Islampur in association with IEEE women engineering Affinity Group and Institute's Innovation council on 8th March 2025.

FDP AND WORKSHOP CONDUCTED

- Three Days workshop conducted (29-31 January 2015) on "P-Spice software", at TINJRIT, Udaipur for students and faculty.
- 2 days workshop conducted on "PSCAD" at Sangam University, Bhilwara in April 2017.
- 2 days workshop conducted on "**PLC-SCADA**" (Wonderware and CoDeSys software) at Sangam University, Bhilwara in 2018.
- Many Lectures delivered on "PLC" (CoDeSys software) at a cemented pipe company "A Infrastructure, Bhilwara" in 2019.
- 2 days webinar organized on "**Power Plant Operations: Electrical and Mechanical Aspects**" on 24-25 may, 2021.
- Arranged a workshop organized by **IIT Bombay on SCILAB** in 2018.
- Two times Coordinate and organized a **project exhibition on "Intelligence System and Computing"** in Electrical, electronics and computer department on April 2018 and 2019.
- 1 day workshop conducted on "Industrial Automation" at Mewar University, Chittorgarh on 7th February, 2025

Research Guidance

- One M.tech. Dissertation (Mr. Parag joshi) completed under my guidance on "**Impact on voltage stability** during power flow maximization".
- One M.tech. Dissertation (Ms. Srishti Gupta) completed under my guidance on "Simulation Based Performance Analysis of DSTATCOM for Power System".
- One M.tech. Dissertation (Mr. Vinay Rohiwal) completed under my guidance on "**Implementation of Efficiency** Energy Generation of Microgrid from Solar Power Plant".
- One M.tech. Dissertation (Ms. Shweta Joshi) completed under my guidance on "Modeling and Analysis of Solar Power Generation Forecasting using Machine Learning Technique".
- One Ph.D Scholar (Mr. Amit solanki) is running under my guidance on "Development of Machine learning based Smart Irrigation System".

HOBBIES

- Love to help the ones who are in need and treat them like friends.
- Travelling new places, Playing Chess & Reading books.
- Watching movies and listening Music.

Reference

- 1. Dr. B.R.Natrajan, Dean in chemical engineering at Banasthali vidyapeth, Rajasthan.
- 2. Dr. Nitin Gupta as a Associate Professor (EE dept.) at MNIT, Jaipur.

PERSONAL DETAILS

Date of Birth : 22rd September 1987

Father's Name : Mr. Surendra Kumar Gandhi

Residential Address: 26-'Mainak', near nala, Subhash Nagar, Distt. Bhilwara (Raj.)-311001

Permanent Address: 26-'Mainak', near nala, Subhash Nagar, Distt. Bhilwara (Raj.)-311001

- Marital status : Married
- Sex : Male

Languages Known : Hindi and English

Date:

Place: Bhilwara

Dr. ATUL GANDHI