

## Resume



### Dr. Nidhi Gupta

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#### Objective

To attain good position and maintain cordial relationship in Academic Institution by giving the practical knowledge which makes the student's career progressive.

#### Current Status

Presently working as an Asst. Prof in Maharaja Surajmal Institute Of Technology, under I.P. University, Delhi (since 7<sup>th</sup> Jan. 2011)

#### Teaching Experience

more than 20 years

#### Employment Record

S No.	From [Month & Year]	To [Month & Year]	Employer Name	Positions Held	No of Years
1	January 2011	Till date	MSIT, GGSIPU	Assistant Prof.	13
2	September 2007	January 2011	GPMCE, GGSIPU	Sr. Lecturer	4
3	January 2002	September 2007	GPMCE, GGSIPU	Lecturer	5

#### Educational Qualification

**PHD. (2022)** - PhD in Power System from DTU , Delhi.

**M.E.**(2003-2006) in Power Apparatus And System from D.C.E. with 71.4%

**B.Tech**(1997-2001) in Electrical Engg. With 66.5% from A.I.E.T, Faridkot (Punjab) under Punjab Technical University, Jalandhar (Pb.)

**School** Happy Model School, New Delhi-58

Class12<sup>th</sup> (1997)-74.5%

Class10<sup>th</sup>(1995)-Maths 99%, Science 85%, Agg 69%

**Area of Interest/Specialization:** Power System / Renewable Energy , Electric Vehicle, IOT, AI, Battery energy sources

## **Patent**

1. Patent is **granted** with a title “System to manage magnetic detachable lamp” **11/01/2024**, 497601 with application number – 202211034652.
2. Patent is **published** with a title “Design and development of IOT based passenger counting in transportation System” dated 29-10-2021 and application number 202111047869.
3. Patent is **published** with a title “Early flood detection system using internet of things (IOT)” dated 20-01-23 with application number – 202311004108.

## **Key Publications In Journal**

1. **Nidhi Gupta**, Narendra Kumar, B. Chitti Babu “JAYA Optimized Generation Control Strategy for Interconnected Diverse Source Power System with Varying Participation” Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor and Francis, March 2022, 31;44(1):1813-29. **SCI, Impact Factor – 3.447**,. ISSN: 1556-7036 (Print) 1556-7230 (Online) , DOI.org/10.1080/15567036.2019.1646354.
2. **Nidhi Gupta**, Narendra Kumar “Particle Swarm Optimization based Automatic Generation Control of Interconnected Power System incorporating Battery Energy Storage System” **Scopus indexed**, Elsevier, Procedia Computer Science, Volume 132, 2018, Pages 1562-1569, ISSN: 1877-0509, **UGC-46138**, <https://doi.org/10.1016/j.procs.2018.05.120>, April 2018.
3. **Nidhi Gupta**, Narendra Kumar, “AGC of Three Area Interconnected Power System Incorporating SMES” in International Journal of Industrial Electronics and Electrical Engineering , **UGC- 43965**, ISSN(p)- 23476982, ISSN(E): 2349204X, VOL.6 , Issue- 1, Jan 2018.
4. Nidhi Gupta, “Simulation of PV system during partial shedding” Satyam-**MSIT** Journal of research, 2017, Vol. 6, 87-91, ISSN: 2319-7897.
5. Nidhi Gupta, “Footsteps Generating Electricity Using D.C. Motor” Satyam-**MSIT** Journal of research, 2016, Vol. 5, 28-32, ISSN: 2319-7897.
6. Nidhi Gupta, “Fuzzy controlled AGC Strategy of Two Area Interconnected Thermal Power System Incorporating SMES , 2021, **MSIT** Journal of Research –SATYAM , Vol. 9 (2020-21) , ISSN: 2319-7897, 109-114.
7. Nidhi Gupta and Shaifali M. Arora, “A Novel Jaya Based Automatic Generation Control of Two Area Interconnected Power System”, in Indian Journal of Science & Technology, **UGC, wos**, Print ISSN : 0974-6846 , Online ISSN : 0974-5645, 2022. <http://dx.doi.org/10.17485/IJST/v15i47.1430>.
8. Nidhi Gupta, Shrey Vashist, Diwash Manjhi, Anshul and Vivek “Monitoring and Controlling of Automated Residences”, **MSIT**, Satyam 23-24.

9. Telecom customer churn prediction model : Analysis of machine learning techniques for churn prediction and factor identification in telecom sector. Journal of Information and Optimization Sciences, March 2024, 45(2), 613-630. **Esci**, was <https://doi.org/10.47974/JIOS-1599>
10. Nidhi Gupta , Sarvagya Mishra, Samarth Kumar, Rakhi Kamra, Sunil Gupta, Abhishek Gandhar & Saket Gupta “Comparative Analysis of a Supercapacitor and Li-ion battery based Electric Vehicle” Journal of Information and Optimization Sciences, March 2024, 45(2), 515-522. **Esci**, was <https://doi.org/10.47974/JIOS-1589>.
11. Dr. Nidhi Gupta “Facial detection in computer vision: bridging gap between CNN, HAAR Cascade AND MTCNN” in the 2nd International Conference on "Artificial Intelligence and Applications" (ICAIA 2024) has been accepted in **scopus** , during March 19-20, 2024 at MSIT.
- 12.

### **Key Publications In Conferences**

1. Dr. Nidhi Gupta has presented a paper “Facial detection in computer vision: bridging gap between CNN, HAAR Cascade AND MTCNN” in the 2nd International Conference on "Artificial Intelligence and Applications" (ICAIA 2024), during March 19-20, 2024 at MSIT.
2. Dr. Nidhi Gupta has presented a paper “Diabetes Prediction Model” paper in ICACCIS-2024 organized by Banarsidas Chandiwalla Institute of Information Technology on 30th March 2024 in online mode. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4915080](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4915080)
3. Dr. Nidhi Gupta has presented a paper “Simulation and Hardware Model for Buck converter and boost converter” paper in "International Conference on Renewable Power 2024," ICRP-2024 during March 28-29, 2024, at MAIT.
4. Dr. Nidhi Gupta has presented a paper “Comparative Analysis of a Supercapacitor and Li-ion battery based Electric Vehicle “Renewable Energy Potential for Sustainable Initiatives , REPSI 24, 8-9 Feb 2024, BVCOE, New Delhi.
5. Dr. Nidhi Gupta has presented a paper “Telecom Customer Churn Prediction Model: Analysis of Machine Learning Techniques for Churn Prediction and Factor Identification in Telecom Sector” Renewable Energy Potential for Sustainable Initiatives , REPSI 24, 8-9 Feb 2024, BVCOE, New Delhi.
6. Nidhi Gupta, Shrey Vashist, Vivek and Diwash Manjhi “Development of Air Quality Monitoring system Using IoT” in hybrid mode ,springer sponsored SIGMAA 2023, in International Conference of Advances in Intelligent Systems and Computing Series, Springer on 15th -16 th Dec 2023.

7. Nidhi Gupta, Shrey Vashist, Diwash Manjhi, Anshul, Chandra Prakash Singh “Development of Home Automation system with LPG Leakage Detection System Using IOT” , in International Conference on Advances in Multidisciplinary Research & Innovation (ICAMRI-2023) , ugc sponsored and organized by School of Engineering and Technology, Sushant University, Gurugram, 28th -29th October 2023.
8. Nidhi Gupta, Parveen “Comparative Analysis Of Design And simulation of DC-DC Boost converter” National Conference on Smart Energy, VLSI and embedded systems – 2021 (NCSEVES – 2021) , JSS academy of technical education, Noida on 24<sup>th</sup> September, 2021.
9. Nidhi Gupta, Narendra Kumar, Nisha Singh “PSO Tuned AGC Strategy of Multi Area Multi-Source Power System Incorporating SMES”, International Conference on 2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2018), DTU Delhi, October 22<sup>nd</sup> -24<sup>th</sup>, 2018.
10. Nisha Singh, Narendra Kumar, Nidhi Gupta et. al “A Comparative Analysis of AGC of Two-area Hydro-Thermal Power System Interconnected by AC-DC Parallel Link in Restructured Power System” 2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2018) , DTU Delhi, October 22<sup>nd</sup> -24<sup>th</sup>, 2018.
11. Nidhi Gupta, Narendra Kumar presented the paper in the National Electrical Engineering Conference (NEEC-2011) held w.e.f. 16th -17th Dec, 2011 on “Power and Energy Systems for Tomorrow” at Delhi Technical University, Delhi.
12. Nidhi Gupta, presented the paper “Comparison of integral controller and optimal controller through AGC in interconnected thermal hydro thermal system” in the National Conference on Smart Energy – Generation, Promotion and Conservation held January 2010, at Chitkara University, Punjab.

### **Awards and Recognitions**

1. Under My mentorship students of EEE are awarded as second prize in Inter-college B.Tech (EEE) Major project competition 2017 in GGSIP University entitled “Hybrid renewable energy source stand-alone system”.
2. I was awarded with Research Excellence Award, MSIT (2022) for an outstanding contribution to the quality of research.
3. I earned/grabbed a Certificate of Appreciation in recognition of MSIT outstanding achievements in NDLI Club (National Digital Library of India), Project of IIT Kharagpur under Ministry of Education, Government of India, through its National Mission on Education through Information and Communication Technology (NMEICT).

### **Memberships of Professional bodies –**

1. IEEE member
2. IAENG member
3. ISTE
4. Ndli Library
5. Lions Clubs International

### **Book Chapter**

1. “An Overview of E-Mobility-Based Threats to the Power Grid” in *E-Mobility in Electrical Energy Systems for Sustainability*, March 2024, IGI Global , ISSN 9798369326114, <https://www.igi-global.com/book/mobility-electrical-energy-systems-sustainability/333598>.

### **Outreach Activity Involvement (Till Date)**

1. Member of organizer committee in International Conference on 2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2018), DTU Delhi, October 22nd -24th, 2018.
2. Chair the session for the ICAMRI "International Conference on Advances in Multidisciplinary Research and Innovation" organized by Sushant School of Engineering and Technology on 28<sup>th</sup> and 29<sup>th</sup> day of October 2023.
3. Advisory member in the ICAMRI "International Conference on Advances in Multidisciplinary Research and Innovation" organized by Sushant School of Engineering and Technology on 28<sup>th</sup> and 29<sup>th</sup> day of October 2023.
4. "Technical Program Committee Member" for the ICRP-2024 The EEE Department of [Maharaja Agrasen Institute of Technology \(MAIT\)](#) is pleased to announce the "International Conference on Renewable Power 2024," scheduled for March 28-29, 2024 conference.
5. Chair the session for the the ICRP-2024 The EEE Department of [Maharaja Agrasen Institute of Technology \(MAIT\)](#) in the "International Conference on Renewable Power 2024," scheduled for March 28-29, 2024 conference.
6. I worked as reviewer in Respi 2024 conference at BVP delhi.
7. I worked as a reviewer in International Journal of Modelling and Simulation , Journal of Engineering Research and Reports .
8. I took seminar on IOT and project automation at TECNIA on 11<sup>th</sup> May 2024.
9. Paper presentation in SIGMAA 2023, in International Conference of Advances in Intelligent Systems and Computing Series, Springer, 15-12-2023 to 16-12-2023.
10. TWO Paper presentation in REPSI 24 in 4th international conference on Renewable energy for sustainable initiatives, BVCOE, New Delhi.
11. Paper presentation in ICAMRI 23"International Conference on Advances in Multidisciplinary Research and Innovation" organized by Sushant School of Engineering and Technology on 28th and 29th day of October 2023.
12. Paper presentation in in ICACCIS-2024 organized by Banarsidas Chandiwalla Institute of Information Technology on 30th March 2024 in online mode.

13. Paper presentation in the 2nd International Conference on "Artificial Intelligence and Applications" (ICAIA 2024), during March 19-20, 2024 at MSIT.
14. I participated In Smart India Hackathon (sih 23 ) with ece students topic.
15. I conducted a three day's training program on Internet of things is scheduled for the students of 2nd year ECE and EEE students from February 22nd to 24th , 2024 at MSIT.
16. I conducted a seminar on start up
17. I worked as co-convenor of NDLI MSIT for checkmate event on 31ST January 24.
18. I worked as a coordinator of NDLI MSIT as a talk on Aril 2024.
19. I set various final question paper for EEE , B.Tech like Power Electronics , PPI etc

### Workshop attended

1. I attended two days workshop on "Recent Trends in New and Sustainable Energy Sources "held at Guru Prem Sukh Memorial College of Engineering held on 12<sup>th</sup>-13<sup>th</sup> Feb 2009.
2. I attended workshop on "Understanding Opportunities in solar energy" on 28th March 2012 at MSIT.
3. I attended a two day workshop on "Basics Of Solar/Photovoltaic", held at MSIT, Delhi, from 30th-31st October 2014.
4. I attended **International workshop** on "Computational Intelligence – Theories Application and Future" at IIT Delhi, on 13-14th July 2013.
5. I attended workshop on sensitisation of university administration : gender, disability and social inclusion" organised by Equal opportunity cell, DTU on 24th July 2019.
6. I attended workshop on Digital literacy and online safety" organised by DTU on 9th April, 2019. Matlab and Simulink For Engineering Education on 24th sep'2013.
7. I attended Online National Workshop on Grid Power Electronics Technology held at IIITDM Kancheepuram, Chennai during 18-19, Feb 2022.
8. I attended The IPR awareness/training program under the special mission called "National Intellectual Property Awareness Mission (NIPAM)" at Maharaja Surajmal Institute of Technology on 05/01/2022.
9. I completed **mooc NPTEL -AICTE** Faculty Development Programme on "Electric Vehcles- Part 1" funded by the MoE, Government of India from 4 weeks , Jan-Apr 2022.
- 10.** I completed ISTE & BNY Mellon – Skill Development Programme on "Internet Of Things Phase V" 28 March – 11 May 2023 conducted by **ISTE**.
11. I completed **mooc NPTEL-AICTE** Faculty Development Programme on "Effective writing" conducted by IIT Madras and funded by the MoE, Government of India during 4 week , Jan 2023-Feb.-2023.
12. I completed **mooc NPTEL -AICTE** Faculty Development Programme on "Introduction to programming in C" conducted by IIT Madras and funded by the MoE, Government of India during 8 week , Jan 2023- March-2023.
13. I attended a two week AICTE Training And Learning (**ATAL**) Academy Blended/Hybrid FDP on "Electric Vehicle Technology Challenges & Infrastructure" from hybrid 2022-12-12 to 2022-12-17 and offline 2022-12-19 to 2022-12-23 at Delhi Technological University.

14. I completed 8 days online training program by **UGC – Malaviya Mission Teacher Training Centre** – SMVDU on NEP Orientation and Sensitization Program from 12<sup>TH</sup> TO 22<sup>ND</sup> February 2024.
15. IEEE National Workshop on Research Methodology organized by IEEE Student Branch, Indian Institute of Information Technology, Design & Manufacturing (IIITDM), Kancheepuram, Chennai during 11-15, March 2024.
16. I completed **mooc NPTEL** -AICTE Faculty Development Programme on “Introduction to Internet Of Things” conducted by IIT Madras and funded by the MoE, Government of India during 12 week , Jan-April 2024.

### **Organized**

1. Department of Electrical and Electronics Engineering in association with ECE and ISTE organised A three day’s training program on Internet of things from 22<sup>nd</sup> Feb, 2024 to 24<sup>th</sup> Feb, 2024
2. Department of Electrical and Electronics Engineering in association with IIC- MSIT organized the workshop on “Startup Planning: Legal and Ethical Steps” in collaboration with BYST (Bharatiya Yuva Shakti Trust) on 13th March 2024.

SEMINAR ON STARTUP PLANNING: LEGAL AND ETHICAL STEPS	MSIT-Delhi	Seminar	13th Mar 2024	EEE	Dr.Sudesh Pahal, Dr Nidhi Gupta
Seminar on Empowering Future Entrepreneurs	MSIT-Delhi	Seminar	15th Mar 2024	EEE	Dr.Sudesh Pahal, Dr Nidhi Gupta
Internet of things	MSIT-Delhi	Workshop	22nd Feb, 2024 to 24th Feb, 2024	EEE	Dr Nidhi Gupta , Prof. Neeru , Dr. Shaifali
Charting Success : Talk with Ms. Saloni Vats	MSIT-Delhi	Talk	26 th April, 2024	EEE	Prof. Meena Tushir, Dr Nidhi Gupta

### **Faculty Development Programme attended**

1. I attended AICTE –ISTE Short Term Training programme two week course on “Automation in Electrical Power distribution Systems “ organized by Delhi college of Engineering, during dec20-31,2004 .
2. I attended two days Faculty Development Program on “Fuzzy Logic and Neural Networks: An Approach to Soft Computing”, held at MSIT on 4<sup>th</sup> and 5<sup>th</sup> November, 2011.
3. I attended two weeks AICTE staff Development Programme on “Flexile AC Transmission Systems And Power Systems Voltage Stability :Recent Advances” on 11<sup>th</sup> – 22<sup>nd</sup> July, 2011 at Delhi Technical University , Delhi .
4. I attended two days workshop on Signal Processing held at Guru Prem Sukh Memorial College Of Engineering held on 15<sup>th</sup>-16<sup>th</sup> Jan 2010.



5. I attended the National Electrical Conference (NEEC-2011) held w.e.f. 16<sup>th</sup> -17<sup>th</sup> Dec, 2011 on “Power and Energy Systems for Tomorrow” at Delhi Technical University, Delhi.
6. I attended One day workshop on “Human Values and Professional ethic” on 4<sup>th</sup> Feb 2012 at MSIT.
7. I attended FDP on “ Intelligent tools for various Engineering Applications” on 12<sup>th</sup> & 13<sup>th</sup> April, 2012 at MSIT.
8. I attended FDP on “SPSS and Research Methods” held on 27<sup>th</sup> -28<sup>th</sup> July 2012 at IMS ,Noida.
9. I attended “Internal Quality Auditors” Training Programme on Quality Management System as per ISO 9001:2008 held at MSIT on 2<sup>nd</sup> March 2012.
10. I attended short term training programme sponsored by UGC on “Signal Processing In Modern Electrical Systems ” at DTU Delhi , on 9<sup>th</sup>-13<sup>th</sup> Dec. 2013.
11. I attended one day seminar on “ Matlab and Simulink For Engineering Education” on 24<sup>th</sup> sep’2013 in delhi.
12. I attended “Internal Quality Auditors” Training Programme on Quality Management System as per ISO 9001:2008 held at MSIT on 17<sup>th</sup> dec 2013.
13. I Attended a One Week FDP on Intelligent Control Techniques and Their Applications , held at DTU, Delhi, during December 22-26, 2014.
14. I Attended a One Week FDP on Renewable energy and alternative Fuels, held at DTU, Delhi, during June 16-20, 2014.
15. I Attended one day FDP on “Research Challenges and Emerging Trends in Electrical Engineering”, held at MSIT, Delhi, on 25<sup>th</sup> February, 2015.
16. I attended “Internal Quality Auditors” Training Programme on Quality Management System as per ISO 9001:2008 held at MSIT on 10<sup>th</sup> Nov, 2014.
17. I attended a TEQIP-II sponsored FDP on “Nature Inspired Algorithms And Their Applications” during July 13<sup>th</sup> – July 17<sup>th</sup> 2015, at DTU, Delhi.
18. I attended two days workshop on “Recent Trends in Power Electronics for Sustainable Energy “held at DTU, Delhi on 6<sup>th</sup>-7<sup>th</sup> Nov. 2015.
19. I attended one week FDP on “Artificial Neural Networks”, conducted by NITTTR, Chd held at MSIT, Delhi, during 25<sup>th</sup> April-29<sup>th</sup> April, 2016.
20. I attended international workshop on “Computational Intelligence – Theories Application and Future” at IIT Delhi , on 13-14<sup>th</sup> July 2013.
21. I attended one week ICT based Faculty Development Programme on “power electronics & its applications” from 27<sup>th</sup> November to 1<sup>st</sup> December, 2017.
22. I completed NPTEL-AICTE Faculty Development Programme on “Electric Vehcles- Part 1” funded by the MoE, Government of India from Jan-Apr 2022.
23. I attended two Week FDP on PE Applications in RPGs organized by IIITD&M Kancheepuram, Chennai during 21-30, Sep 2021 in association with E&ICT Academy of NIT Warangal.
24. I attended one week Faculty Development Programme on the topic Recent Trends in Artificial Intelligence and its Applications” at MSIT, Janakpuri from 29-11-2021-30-12-2021.
25. I attended one week Faculty Development Programme on the topic National Education Policy 2020: Roadmap to develop faculty for 21<sup>st</sup> Century” at MSI Janakpuri from 27-12-2021-31-12-2021.
26. Dr. Nidhi Gupta attended a two week AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on "Electric Vehicle Technology Challenges & Infrastructure" from 2022-12-12-2022-12-17 to 2022-12-19-2022-12-23 at Delhi Technological University.



27. Dr. Nidhi Gupta, Assistant Professor of MSIT has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Machine Learning at Delhi Technological University, Delhi from 07/11/2022 to 23/12/2022.
28. Dr. Nidhi Gupta has completed one week FDP on “Internet Of Things” from 15th January 2024 to 19th January 2024 conducted by ECE , MSIT in association with Brain Mentors Pvt. Ltd.
29. Dr. Nidhi Gupta has completed one week FDP on NITTTR

### **Supervised B.Tech project**

1. Advanced Blind stick with Voice Module
2. Speed control of single phase Induction motor
3. Hybrid renewable energy source stand-alone system
4. Simulation of PV system during partial shading
5. Ultrasonic range finder
6. Comparative Analysis of Design and Simulation of DC-DC Boost Converter
7. Speed Regulation of fan using TRIAC.
8. Face detection using neural network
9. Video processing based adaptive traffic control
- Piezo energy generation & train gate control system
10. Simulation of Load frequency control in microgrid
11. E-Bicycle
12. Mag tech led
13. Iot antenna
14. server

### **MSIT Institutional Duties**

- a. Member of Discipline / Anti Ragging Cell (16-17, 18-19)
- b. Member of College Magazine (17-18)**
- c. Member of All AICTE, GGSIPU and Govt. schemes Committee (19-20, 20-21)
- d. Member of Student Grievances committee (21-22) (22-till now)
- e. Convener of Library Committee (21-22) (22-till now)
- f. Member of Anti tobacco (23-till now)

### **MSIT Departmental Duties**

- a Member of ISO Committee 2013-2023.
- b. Training Incharge of EEE students (18-19, 19-20, 21-22, 22-23).
- c. Project Incharge (17-18)
- d Departmental Library Incharge (21-22) (22-till now)
- e. Faculty Achievements Data record In charge - FDP/Seminar/Workshops/Awards (2018-2023)
- f. Lab Incharge of Power Electronics Lab since 2011.
- g. Departmental Laboratory Incharge (2023)

### **Other Extracurricular activities**

1. I worked as a member of Technical committee
2. I worked as a member of website committee in.
3. I worked as a Head of Cultural Committee in.
4. I worked as an active member of Time Table Committee in GPMCE.
5. I actively participated in many group dances at school & inter college level.
6. I actively participated in the Debate at college level.

**Software Exposure**

**Operating System-** Win 2010, Dos

**Programming Language** – C,C++,Core Java, Html, Auto Cad, Matlab

**Personal Profile**

**Date Of Birth**

09-03-1980

**Husbands Name**

Mr. Vikas Gupta

**Marital Status**

Married

**Language Known**

English, Hindi, Punjabi, Sanskrit

**Hobbies**

Solving Puzzles, Dancing, Listening Music, Reading mythological Books, Listening motivating lectures, learning latest Technology and encouraging students.

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