


Sri SaiRam Engineering College

Department of Electrical and Electronics Engineering

NAME	Dr.C.Nayanatara 
DESIGNATION	Professor
QUALIFICATION	B.E.,MBA, M.Tech., Ph.D.
AREA OF SPECIALIZATION	Power Systems, Renewable Energy, Soft Computing Techniques

Anna University Recognized Supervisor

Ref no.343004

PROFESSIONAL EXPERIENCE:

Name of the Institution	Position	From	To	Experience
Sri SaiRam Engineering College	Assistant Professor	21-06-2007	Till date	-
Valliammai Engineering College	Lecturer	01-06-2003	31-05-2007	4 Years
Innovative CAD GrafX Pvt.Ltd.	Sr.Academic Counsellor	03.06.2001	30.05.2003	2 Years

Research Areas of Interest:

- Distributed Generation and Micro grid
- Power Quality Issues
- Power System Operation and Control
- Smart Grid
- IoT based Heuristic Search Techniques

- Flexible AC Transmission Systems
- High Voltage Engineering
- Waste Management

Funds Received:

- Received Rs.7,500/- from PALS INNOWAH on July 2019.

LIST OF PUBLICATIONS:

International Journals:

- **Nayanatara. C** has published the paper entitled, “Optimization of Dg parameters in the distributed network in the presence of Battery powered energy source using Differential Evolution Algorithm”, Solid State Technology, Volume 63. No. 6, 2020.
- **Nayanatara. C** has published the paper entitled, “Overcurrent and Earthfault Relay Coordination for Microgrid with Numerical Relay Features”, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume 9. No. 3, January 2020.
- **Nayanatara. C** has published the paper entitled, “Comparative analysis of PV powered KY and Luo converter”, International Journal of Emerging Trends in Engineering Research, Volume 8. No. 10, October 2020.
- **Nayanatara. C** has published the paper entitled, “IoT Based Integrated Home Security and Electrical Appliances Control System”, Test Engineering and Management, (2019).
- **Nayanatara. C** has published the paper entitled, “IoT based approach in a power system network for optimizing distributed generation parameters”, CMES, vol.119,2, (2018).
- **Nayanatara. C** has published the paper entitled, “Approach of hybrid PBIL control in distributed generation parameters for IEEE and real time Indian utility system” on IET Renewable Power Generation System. (2017).
- **Nayanatara. C** has published the paper entitled, “Hybrid Optimization Implemented for Distributed Generation Parameters in a Power system Network” on Elsevier Publication International Journal of Electrical Power and Energy Systems 78 (2016) 690-699.
- **Nayanatara. C** has published the paper entitled, “ GA Implemented for Distribution Generation Parameters in Ieee and Indian Utility System” on Middle-East Journal of Scientific Research, Volume 10, Issue 4, July 2015, p. 1552 – 1557.
- **Nayanatara. C** has published the paper entitled, “ MGA Approach for optimization of Distributed Generation parameters in power system Network” in International Journal of Advancements in Electrical Engineering - IJAEEE , Volume 4, issue 2, OCT (2015) P. 0147-0151.
- **Nayanatara. C** has published the paper entitled “Micro-Genetic Algorithm based Optimization of DG Devices Considering the Economic Saving Cost”, International Journal of Electrical Engineering and Embedded Systems, 2011, Vol 2, Issue 2, pp 191-199.

- **Nayanatara. C** has published the paper entitled “Optimization of DG Devices for welfare maximization International Journal of Electrical Engineering and Embedded Systems, 2010, Vol 2, Issue 2, pp 201-208.

National Journals:

- **Nayanatara. C .** (2014), “Application of SA based DG Optimization in the Indian Electrical Network”, Indian Streams Research Journal, Vol. 4(5), Pp:1-12,2014.

International Conferences:

- **Nayanatara. C** presented the paper titled “Congestion Management in Deregulated Power Systems using Genetic Algorithm”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
- **Nayanatara. C** presented the paper titled “Flower Pollination Algorithm in DPS Integrated DFIG for Controlling Load Frequency”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
- **Nayanatara. C** presented the paper titled “GA based Simultaneous Optimization of hybrid Distributed Generation in the Power System Network”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
- **Nayanatara. C** presented the paper titled “Optimization of Renewable Energy Parameters for maximizing Power output”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
- **Nayanatara. C** presented the paper entitled “**A Control Strategy adopted for improving Transient Stability in EESG based Wind Turbines**”, **IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2019.**
- **Nayanatara. C** presented the paper entitled “Optimization of hybrid energy resources using HOMER software” IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2019.
- **Nayanatara. C** presented the paper entitled “Development of Bi-directional energy meter for a grid-connected PV system with power quality improvement using D-STATCOM” IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2019.
- **Nayanatara. C** presented the paper entitled “A hybrid technique of machine learning and data analytics for optimized distribution of renewable energy resource targeting smart energy management” Elsevier procedia Computer Science,2019.
- **Nayanatara. C** presented the paper entitled “Multi objective placement in UCP by improved honey-bee mating optimization’ IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2018.
- **Nayanatara. C** presented the paper entitled “Control strategy adopted for optimization of DG parameters in the power distribution network’ IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), on April 2017.

- **Nayanatara. C** presented the paper entitled “Fuzzy-SA approach for optimization of Distributed Generation Parameters in a Power System network’ IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2016.
- **Nayanatara. C** presented the paper entitled “Optimal Location of UPFC for congestion relief in power system using simulated annealing algorithm”, IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2016.
- **Nayanatara. C** presented the paper entitled “Simulated Annealing approach for congestion minimization using Distributed power Generation’ IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2015.
- **Nayanatara. C** presented the paper entitled “Novel Multiobjective optimal placement of Multiple Distributed Generations in IEEE 33 bus Radial System using Simulated Annealing”, IEEE International Conference on Circuit, Power and Computing Technologies, February 2015
- **Nayanatara. C** presented the paper entitled “Optimal Location of Distributed Generation using Micro Genetic Algorithm, IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2014.
- **Nayanatara. C** presented the paper entitled “Optimization of Distributed Generation parameters in a power System Network for Welfare Maximization”, IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2014.
- **Nayanatara. C** presented the paper entitled “Design and Development of Series Hybrid Vehicle”, International conference on computation of power energy, information and communication ICCPEIC-2014.
- **Nayanatara. C** presented the paper entitled “Novel Optimization of Power quality Problems using Genetic Algorithm”, IEEE International Conference on Futuristic Trends in Electronics Engineering, April 2014.
- **Nayanatara. C** presented the paper entitled “Enhancement of Power Quality using FACTS Device”, IEEE International Conference on Advanced Research in Engg. and Technology on February 2013.
- **Nayanatara. C** presented the paper entitled “Optimal Location of FACTS Devices for System Loadability”, IEEE International Conference on Computation of Power, Energy Information and Communication (ICCPEIC), 2013.
- **Nayanatara. C** presented the paper entitled “Optimal Location of Facts Device for Device ATC Enhancement Using GA”, International conference on computation of power energy, information and communication ICCPEIC-2012

National Conference:

- **Nayanatara. C** , has presented the paper entitled “Harmonic Distortion Using Shunt Active Filter by Fuzzy Control technique”, National Conference on Intelligent power Electronics Technology (IPET-2015) April 2015.
- **Nayanatara, C**, ‘Congestion Management by determining optimal location of TCSC using Genetic Algorithm’, National Conference on Computational Intelligence in Power

Apparatus and System at SRMUniversity,2007.

- **Nayanatara. C .** Harmonic Reduction using-36 Pulse in HVDC Transmission System. National Conference on Cutting edge Technology in Power Conversion and industrial drives, Conference Proceedings of PCID, 2005.
- **Nayanatara, C,** 2008, ‘Available Transfer Capacity assessment and enhancement using FACTS devices’, National Conference on Research Scholars on Application of Emerging Technologies at Adhiyaman College of Engineering.2008.

Patents:

Title of Invention	Inventors Name	Application No	Date of Filing	Publication Date	Status
HEURISTIC WINDMILL STRUCTURE CONSIDERING BLADE DESIGN TO OBTAIN THE MAXIMUM POWER OUTPUT	C.NAYANATARA	202041045363 A	19/10/2020	30/10/2020	PUBLISHED
IOT BASED AUTOMATED TOILBOTS	C.NAYANATARA	202041045363 A	19/10/2020	30/10/2020	PUBLISHED

Books Published:

- Power Quality

Book Chapter Published:

1. “Heuristic Windmill Structure Considering Blade Design to Obtain the Maximum Power Output” In Recent Developments in Electronics, Computing and Mechanical Sciences, ANVI BOOKS AND PUBLISHERS- NEW DELHI
2. “Prediction and Scheduling of Energy Consumption using Machine Learning” in DIPTI Press.

Academic Responsibility in Sri SaiRam Engineering College

- NAAC Dept. Coordinator
- Organized International Conference
- IIT PALs Coordinator
- Project coordinator(2009-2012)
- Seminar In-Charge (2013,2017,2019)
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Membership in Professional Bodies

- Member of IEEE (Institution of Electrical and Electronics Engineers) -**94401275**.
- Life member of ISTE (Indian Society for Technical Education) - **LM 31245**

Programmes Organized

- Coordinated IIT Pals Workshops and Seminars and Winner of Innowah .
- 15 days AICTE Sponsored Faculty Development Program on Transmission and Distribution at Sri SaiRam Engineering College, Chennai.
- 2 days AICTE Sponsored Seminar at Sri SaiRam Engineering College, Chennai.
- 7 days (One week) ISTE-SRM Sponsored STTP on Power Quality Issues in power system network at Sri SaiRam Engineering College, Chennai.
- Convener and Conference Chair for IEEE Sponsored International conference on power, control and transmission systems (ICPECTS) in the year 2017 and 2020.

Special Lectures Delivered:

- A lecture on the topic “Genetic Algorithm” in AICTE sponsored SDP at Adhiparasakthi Engineering College, Melmaruvathur.
- A lecture on the topic, “FACTS devices” in AICTE sponsored SDP held at Adhiparasakthi Engineering College, Melmaruvathur.
- A lecture on the topic, “ALFC Mechanism” in the Anna University, Chennai sponsored FDP, “Power System Operation and Control” held at Vallaiammai Engineering.
- A lecture on the topic, “Power Quality Issues” in AICTE sponsored Seminar held at Adhiparasakthi Engineering College, Melmaruvathur.
- A lecture on the topic, “Micro-Genetic Algorithm for FACTS Controller” in AICTE SDP held at Adhiparasakthi Engineering College, Melmaruvathur.
- A lecture on the topic, “Heuristic Search methods on power system analysis” at Anna University sponsored FDP at Sri SaiRam Engineering College.
- A lecture on the topic, “Power system analysis” at Anna University sponsored FDP at Jerusalem Engineering College.
- A lecture on the topic, “Power World Simulator” at STTP at Vallaiammai Engineering College.

- A lecture on the topic, “Genetic Algorithm and its Applications” at Vellammal Engineering College, Madurai.

Programme Attended:

- Attended Workshop on “**Embedded System and its applications**” at SRM University.
- Attended Workshop on ‘**PLC and its Applications**’ organized by the Department of Electrical and Electronics Engineering, Sri SaiRam Engineering College.
- Attended Workshop on ‘**An Overview of OrCAD**’ organized by the Department of Electrical and Electronics Engineering, Sri SaiRam Engineering College.
- Attended Short Term Training Programme on ‘**Modeling of FACTS Devices and its Applications**’ conducted by the Department of Electrical and Electronics Engineering, SRM University.
- Attended Faculty Development Programme on ‘**Electromagnetic Theory**’ conducted by the Department of Electrical and Electronics Engineering, Valliammai Engineering College.
- Attended Faculty Development Programme on ‘**Control Systems**’ conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
- Attended Faculty Development Programme on ‘**VHDL Programming**’ conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
- Attended Faculty Development Programme on ‘**MATLAB Applications in Electrical Engineering**’ conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
- Participated in the **Indian Science congress** At SRM University.
- Attended the workshop titled:”**Optimization techniques in Power Systems**” at Adhiparasakthi Engineering College.
- Attended STTP on “**MATLAB Simulation of Power Electronic Circuits**” on April 2015 at Sri SaiRam Engineering College.
- Attended FDP on “**Digital Simulation of Power Electronic Circuits through PSPICE software**” on July 2015 at Sri SaiRam Engineering College.
- Attended National level FPP on “**Electrical Simulation Software**” on October 2017 at Sri SaiRam Engineering College.
- Attended “Two days International level Hands on Workshop on **Smart Microgrids And Energy Storage using HOMER**” organized by School of electrical Engineering (SELECT),Vellore Institute of Technology ,Chennai from 9th to 10th March 2018.
- Attended five days Faculty Development Programme on “Modeling, Simulation, Control and Applications of Power Electronic Converters” at QIS college of Engineering and Technology.
- Attended five days short term course on “Artificial Intelligence- Concepts and Applications” at IIITDM.
- Completed Online Course on “ Data Science and Machine Learning”.

- Attended ATAL FDP on “Artificial Intelligence”.
- Attended ATAL FDP on “Internet of Things”.
- Attended ATAL FDP on “Energy Storage”.
- Attended AICTE Sponsored FDP on “ Recent Advancements in Integration of Distributed Energy Resources for Electric Vehicle Charging stations and energy management using Internet of Energy”