

Dr. S. NAZRIN SALMA

PROFESSIONAL INTENTION

To work smart by utilizing the abilities and continuous sharpening of professional skills so as to be a part of the winning team. Seeking a career to share my knowledge with engineers in elite institutions where I can stake my qualities and abilities to gain more experience in to the Control and Instrumentation field with the organization while being resourceful, innovative and flexible.

Residential Address: 222, NJ Cottage, Pothigai Street, Chidambara Nagar, Tirunelveli – 627358 Permanent Address: A-7, Pandian Nagar, A Kosakulam Anaiyur(PO), Madurai–625017. Mail Address: nazrinsalmaphd@gmail.com Contact: +917708714742 +918667836678 Scopus ID: 58192185000 LinkedIn: www.linkedin.com/in/dr-s-nazrin-salma-1a6095270 Google Scholar ID: duF89vEAAAAJ	EDUCATIONDETAILS			
	Year of Passing	Degree/College/CGPA/Class		
	2024	Doctor of Philosophy – Ph.D., <i>Electrical Engineering Anna University, Chennai.</i>		
	2014	Master of Engineering–M.E. <i>Control and Instrumentation Engineering, National College of Engineering Maruthakulam, Tirunelveli. Attained 8.32CGPA First Class</i>		
	2012	Bachelor of Engineering-B.E. <i>Instrumentation and Control Engineering, Sethu Institute of Technology, Virudhunagar. Attained 7.6 CGPA First Class</i>		
	2008	HSC <i>Noyes Matriculation Higher Secondary School. Madurai. Attained 76.4% First Class</i>		
	2006	SSLC <i>Noyes Matriculation Higher Secondary School, Madurai. Attained 79.36% First Class</i>		

Teaching Experience:				
Name of the Institution	Designation/Department	From	To	Months&Year
National College of Engineering, Maruthakulam, Tirunelveli.	Assistant Professor/EEE	16.06.2014	30.07.2020	6.1
Thamirabharani Engineering College, Tirunelveli (Autonomous)	Assistant Professor/EEE	01.09.2020	Till Now	4.1
Total Experience				10.2

Publication Details:

Journals:

Anna University Annexure:

- ✓ **S. Nazrin Salma**, S. Dhanalakshmi, M. Rajkumar, “Design and Control of Modified Super Lift Luo Converter for Electric Vehicle Applications” in the journal “Electric Power Components and Systems”, Taylor and Francis, <https://doi.org/10.1080/15325008.2023.2199744>, ISSN: 1532-5008, Impact factor: 1.5. (Anna University Annexure I)
- ✓ A. Niyas Ahamed, M. Madheswaran, K. Anand, **S. Nazrin Salma**, “Design of an Area Efficient and High-Performance Adder with a Novel Sum Generator” in the journal “Circuits, Systems, and Signal Processing”, Springer nature <https://doi.org/10.1007/s00034-024-02724-z>, Impact factor: 2.3. (Anna University Annexure I)

Scopus Indexed:

- ✓ **S. Nazrin Salma**, S. Dhanalakshmi, M. Rajkumar, “Solar-fed Electric Vehicle for Environmental Protection and Sustainable Development” in the journal “Journal of Environmental Protection and Sustainable Development”, <https://scibulcom.net/en/article/XOLF3WEhYxtPModUU61F>, ISSN: 1311-5065, Impact factor: 0.692. (Scopus Indexed)
- ✓ A. Niyas Ahamed, M. Madheswaran and **S. Nazrin Salma**, “Plasmonic Biosensor Field-Effect Devices for Virus Detection by Carbon Nanomaterials”, in the “Journal of Environmental Nanotechnology” <https://doi.org/10.13074/jent.2024.06.242563>, (Scopus Indexed)

Other Journals:

- ✓ Published a paper titled “Design and Assembly of Juice Mixer” in the journal “International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering”, ISSN: 2320-3765, Impact factor: 8.317.
- ✓ Published a paper titled “Performance Analysis and Comparison of Bi-Directional DC-DC Converters for Electric vehicles” in the journal “International Journal of Advanced Research in Arts, Science, Engineering & Management”, ISSN: 2395-7852, Impact factor: 6.551.
- ✓ Published a paper titled “Fault Protection and Energy Monitoring System for Three Phase Load” in the journal “International Journal of Multidisciplinary Research in Science, Engineering & Technology”, ISSN: 2582-7219, Impact factor: 7.54.
- ✓ Published a paper titled “Arduino Programmed Line Follower” in the journal “International Journal of Innovative Research in Science, Engineering and Technology”, ISSN: 2319-8753, Impact factor: 8.4.

Conferences:

- ✓ Presented a paper titled “Enhanced Antlion optimization based resource allocation in vehicular cloud environment” in 2023 International Conference on Integrated Intelligence and Communication Systems -IEEE Conference.

- ✓ Presented a paper titled “IoT Wearable Medical Device for Heart Disease Recognition Based MI and DI: A Bovw Based MDCNN Classification Approach” in International Conference on Intelligent Algorithms for Computational Intelligence Systems -IEEE Conference.
- ✓ A Novel Approach of DC-DC Converter for Electric Vehicle Battery Charging,3rd International Conference on Signals Machines and Automation, SIGMA 2024 (Acceptance Received)-Springer Conference.
- ✓ A DC-DC Boost Converter with Switching Inductor and Capacitor with High Gain for Solar Microgrid Applications, 2nd International Conference on recent trends in Microelectronics, Automation, Computing, and Communication Systems (Acceptance Received)-IEEE Conference.
- ✓ Presented a paper titled “Online Concrete Corrosion Monitoring System using Semiconductor Oxide Reference Electrode” in ICTESHAM’14, International Conference, Tamizhan college of Engineering and Technology, Nagercoil.
- ✓ Presented a paper titled “A comprehensive review on Modeling and Offline control of Hybrid Electric Vehicles” in ICPES17, International conference, Velammal college of Engineering and Technology, Madurai, Tamil Nadu.
- ✓ Presented a paper titled “Discrete Time Sliding mode current control for inverter fed PMSM Drives” in ACTA 2018, International conference, National College of Engineering, Tirunelveli,TamilNadu.
- ✓ Presented a paper titled “Modeling and control of Antilock Braking System” in APCET 2019,International conference,Francis Xavier Engineering College, Tirunelveli, Tamil Nadu.
- ✓ International Conference on Communication, Cyber Security, Robotics, Artificial Intelligenceand IOT – ICCRAI” Organized by Annai Vailankanni College of Engineering on June 24,2022.
- ✓ Presented a paper titled “Reduced reverse recovery problems for power factor correction using interleaved totem pole boost bridge less rectifier” in the International Conference on Recent Trends in Science, Technology, Engineering & Mathematics (ICSTEM – 2023) on 3rd& 4th March 2023 held @ RRASE College of Engineering.
- ✓ Presented a paper titled “Design and Assembly of Juice Mixer” in the International Conference on Recent Trends in Science, Technology, Engineering & Mathematics (ICSTEM – 2023) on 3rd& 4th March 2023 held @ RRASE College of Engineering.
- ✓ Presented a paper titled “An evaluation of electric vehicle charging systems based on IOT” in the National Convention of Electronics and Communication Engineers-2023 (NCECE-2023) on May 09, 2023.

Patent Details:

- ✓ **Designing A Micro Jammer To Avoid Explosion in Petrol Stations Due to Mobile Usage**
Inventor(S): Ms. S. Nazrin Salma Dr. D. David Neels Ponkumar, Dr. A. Annalakshmi, Mr. V. Arunachalam, Mr. A. Niyas Ahamed,

✓ **A Lora WAN Infrastructure Based Smart Trash Bin Level And Hazardous Gas Management System**

Inventor(S): Dr. E A Mohamed Ali Dr. K.Murugan, Dr. M. Leeban Moses, Mr. S. Mohammed Malik Mubeen, Dr. S. Thangapandi, Dr. K. Anand, Ms. S. Nazrin Salma, Mr. A. Niyas Ahamed,

✓ **Wireless Network Intrusion Detection Device**

Inventor(S): Dr. D. David Neels Ponkumar, Mr. Parthiban, Dr. Arunkumar, Mr. Sam Kingsley, Mr. Niyas Ahamed , Mrs. Nazrin Salma.

✓ **AI Based Network Security Hub**

Inventor(S): Dr. D. David Neels Ponkumar, Mrs. Preena Prasad, Dr. Manohar, Mr. Niyas Ahamed , Dr. Revathy, Mrs. Nazrin Salma Dr. Anand, Mr. Arul Kirubaharan

Book Publication Details:

- ✓ Published a book title “Electric Vehicle Architecture” having ISBN: 978-93-5570-843-4 in AkiNik Publications, 2023.
- ✓ Published a book title “Renewable Energy Technologies” having ISBN: 978-81-976480-2-1 in Aasan Publications, 2024.
- ✓ Published a book title “Sensors and Actuators” having ISBN: 978-81-967142-6-0 in Aasan International Publications, 2024.

Book Chapter Publication Details:

- ✓ Book chapter “Identification of Neuro-Blastoma and Pediatric Cancer using Time series analysis” in edited book titled “Emerging Advancements in AI and Big Data Technologies in Business and Society, IGI Global Scientific Publishing, DOI: 10.4018/979-8-3693-0683-3, July 2024.
- ✓ Book chapter “Energy Conversion for Renewable Power Systems” is being submitted for inclusion in upcoming book titled “Advanced Technologies in 'Renewable Energy and Electric Vehicle Systems - Volume 1 - Modern Power Converters for Renewable Energy Applications: Modeling, Analysis, Design, and Control”, CRC Press (Scopus)- Acceptance received.
- ✓ Book chapter “Advancements in smart energy management: Enhancing efficiency through Advanced Metering Infrastructure and Energy Monitoring” is being submitted for inclusion in upcoming book titled “IoT for Smart Grid”- Revolutionizing Electrical Engineering, IEEE Press, Wiley (Scopus)- Acceptance received.
- ✓ Book chapter “A Kaleidoscope of next-gen power systems: Case studies from the field” is being submitted for inclusion in upcoming book titled “Next generation power renewable energy and electric Vehicle application”, CRC Press, (Scopus) - Abstract Acceptance received.

- ✓ Book chapter “Role of Artificial Intelligence and IoT in Energy Management System” is being submitted for inclusion in upcoming book titled “Artificial Intelligence Techniques for Renewable Energy Systems”, CRC Press, (Scopus)- Acceptance received.
- ✓ Book chapter “Internet of Things and Intelligent Sensors” is being submitted for inclusion in upcoming book titled “Intelligent Technologies for Sensors – Volume II”,Apple Academic Press, (Scopus)- Acceptance received.
- ✓ Book chapter “Variability and Uncertainty in Solar Energy Generation” in edited book titled “Advances in Renewable Energy Engineering (Volume-7), AkiNik Publications.

NPTEL Text Translation:

- ✓ Electrical Machines II (108105131) offered by IIT KGP in Tamil Language, Hours translated: 7.5, 08.01.2024.
- ✓ Industrial Automation and Control (108105088) offered by IIT Kharagpur in Tamil Language, Hours translated: 4.25, 06.10.2020.

Membership Details:

- ✓ ISTE – Life Member.
- ✓ I2OR –Associate Member
- ✓ IAENG – Member
- ✓ ISRD – Member

Reviewer Board Member:

- ✓ The Research Journal, Interdisciplinary Platform for research, ISSN:2454-7301, Publication Impact Factor – 7.650.

Academic areas of specialization:

CourseTaught	U.G.orP.G.
Measurements and Instrumentation, Circuit Theory, Electrical Engineering and Instrumentation, Basic Electrical and Electronics Engineering, Power plant Engineering, Embedded Systems, Control System, Electric Vehicle Architecture, Sensors and Actuators	U.G
Control System Design, Process Control, System Identification and Adaptive Control, Industrial Automation.	P.G

Areas of Interest:

- ✓ Control Systems
- ✓ Process Control
- ✓ Electronic Circuits
- ✓ Electrical Circuits and Network Theory

Technical Skills:

- ✓ Programming Languages :Ladder Logic, C.
- ✓ Core Software :MATLAB,NI - Lab VIEW.

FDP, STTP and Workshops:

- ✓ Participated in ISTE sponsored one day seminar on “Evolutionary Computation” at National College of Engineering, Tirunelveli, Tamil Nadu on March 2012.
- ✓ Participated in AICTE sponsored one day seminar on “Optimization Techniques in Electrical Systems” at National College of Engineering, Tirunelveli, Tamil Nadu on November 2013.
- ✓ Participated in Kudankulam Nuclear Power Project (KKNPP) sponsored One Day National Seminar on “Sustainable Nuclear Energy Development and Its Ecological Safety” at National College of Engineering, Tirunelveli, Tamil Nadu on February 2016.
- ✓ Participated in a two week ISTE workshop on “Control Systems” conducted by IIT Kharagpur under the National Mission on Education through ICT (MHRD) at National College of Engineering, Tirunelveli, Tamil Nadu from 2nd to 12th December 2014.
- ✓ Participated in a two week ISTE STTP on “Electrical Power Systems” conducted by IIT Kharagpur under the National Mission on Education through ICT (MHRD) at National College of Engineering, Tirunelveli, Tamil Nadu from 12th June to 15th July 2017.
- ✓ Participated in one day Faculty Development Program on MATLAB Programming held on 2018 at Velammal college of Engineering and Technology, Madurai, Tamil Nadu.
- ✓ Participated in one day workshop on A Practical approach to modern measurement and control techniques using LabVIEW held on October 2018 at Karpagam College of Engineering, Coimbatore.
- ✓ Participated in one day faculty development program on Smart Grid held on October 2018 at Velammal college of Engineering and Technology, Madurai, Tamil Nadu.
- ✓ Participated in the Webinar on The Art of Writing Research Papers presented by Dr. K.P. Jaya, Professor and Director, Centre for Research, Anna University organized by Chennai Institute of Technology on 29th April, 2020.
- ✓ Participated in webinar on Artificial Intelligence Techniques for Solving Engineering Problems on 8th May 2020 organized by Power Innovative Research Consultancy, Chennai.
- ✓ Participated and secured more than 80% Marks in “National Level Online Quizon Electrical and Electronics Engineering” organized by the Department of Electrical and Electronics Engineering, Dr.N.G.P. Institute of Technology, Coimbatore on 14th May 2020.
- ✓ Participated in webinar Opportunities in Artificial Intelligence by Mr. R. Rajkumar, Assistant Professor, SRM Institute of Science and Technology, organized by Chendu College of Engineering and Technology on 21st May 2020.
- ✓ Participated in the Expert webinar on Emerging Trends and Research Opportunities in Electric Vehicles organized by the department of Electrical and Electronics Engineering, Rajalakshmi Engineering

College, Thandalam, Chennai on 3rd June 2020.

- ✓ Attended a webinar titled Innovation, Incubation, Startups and Research Challenges in India(Online), organized by SRM Institute of Science and Technology, Chennai in the year 2021.
- ✓ Attended a webinar titled Recent Trends and Developments in Electrical Power Engineering (Online), organized by Chadalawada Ramanamma Engineering College, Tirupathi in the year 2021.
- ✓ Attended a webinar titled Renewable Energy Intervention in Industry, Commercial and Domestic Application, organized by Rajeev Gandhi Memorial College of Engineering and Technology, Andhra Pradesh in the year 2021.
- ✓ Attended a webinar titled Renewable Energy Systems(Online), organized by SriRam Engineering College, Chennai in the year 2021.
- ✓ Attended an ATAL webinar in the title of Electric Vehicles (Online), organized by National Institute of Technology, Calicut in the year 2021.
- ✓ Attended a webinar titled Cyber Security in IOT Enabled Smart Grid (Online) organized by Thiagarajar College of Engineering, Madurai, in the year 2021.
- ✓ Attended an ATAL webinar in the title of Electric Vehicles (Online), organized by Maulana Azad National Institute of Technology in the year 2021.
- ✓ Presented a paper entitled Artificial Intelligence in Autonomous Vehicle- A Review in the
- ✓ Participated in the workshop on Simulation of Power Converters using Matlab-Simulink organized in association with Indian Society for Technical Education (ISTE) – Faculty Chapter on 1st and 2nd, August, 2022.
- ✓ Participated in online FDP on Performance analysis of power converters using various modern control techniques for research perspectives organized by Department of Electrical and Electronics Engineering Aalim Muhammed Salegh College of Engineering, Chennai on 27th August 2022.
- ✓ Attended an Industry Guest-Lecture on Solar Projects, Future Technology, Growth & Opportunities organized by Department of Electrical and Electronics Engineering, in association with IEEE, ISTE Students chapter and IIC at Madanapalle Institute of Technology and Science, Madanapalle on 17.09.2022
- ✓ Participated in the Naan Mudhalvan Training of Trainers program for Augmented Reality, Virtual Reality & Metaverse Development held between 19th – 30th September 2022.
- ✓ Participated in the Five Day's Virtual Faculty Development Programme on Electrical Vehicle Technologies – A future Transportation Tool, organized by Department of Electrical and Electronics Engineering from 28.11.2022 to 02.12.2022.
- ✓ Participated in one week virtual Faculty Development Programme on Bio-Medical Sensors and Signal Processing conducted by Department of Electronics and Communication Engineering from 9th Jan 2023 to 13th Jan 2023.

- ✓ Participated in One Week International Faculty Development Programme on Research Innovations and Emerging Advances in Electrical Engineering organized by the Department of Electrical and Electronics Engineering, Easwari Engineering College from 05th to 12th Jan 2023.
- ✓ Participated in IP Awareness/Training program under National Intellectual Property Awareness Mission on January 20, 2023.
- ✓ Participated in the one day FDP on Blooms Taxonomy in Teaching and Learning organized by SanSnow's Nobel Professional Foundation (Approved by MSME and Ministry of Corporate Affairs, Government of India) on February 16, 2023.
- ✓ Participated in one week online Faculty Development Program on Electric Vehicle Drive System organized by Department of Electrical and Electronics Engineering, JCE from 27th Feb to 04th Mar 2023.
- ✓ Undergone Innovation Ambassador (IA) training 'Foundation Level' (Total 15 Sessions of 30 contact hours) conducted in online mode by MoE's innovation Cell & AICTE during the IIC calendar year 2022-23.
- ✓ Undergone Innovation Ambassador (IA) training 'Advanced Level' (Total 15 Sessions of 30 contact hours) conducted in online mode by MoE's innovation Cell & AICTE during the IIC calendar year 2022-23.
- ✓ Participated in the One week International Level Workshop (Virtual Mode) on Opportunities and Challenges in IT Sector: Software Mastery Bootcamp- Unlock your potential held during 6th to 11th march 2023 organized by Department of Electrical and Electronics Engineering in Association with Department of Emerging Technologies in Computer Science and Microcare Academy, Kurnool.
- ✓ Participated in One Week Faculty Development Programme on Artificial Intelligence and its Applications conducted by Department of Computer Science and Engineering from 03.07.23 to 08.07.23 in association with CSI.
- ✓ Attended six days Faculty Development Programme on Empowering Innovators: Unleashing the Potential of Intellectual Property, Research Funding, Technology and Entrepreneurship organized by the Department of Electronics and Communication Engineering, Panimalar Engineering College from 24.07.2023 to 29.07.2023.
- ✓ Participated in the Faculty Entrepreneurship Development Programme funded by Department of Science and Technology, Ministry of science and Technology Govt. of India, organized by Kalasalingam Academy of Research and Education from 24.07.2023 to 05.08.2023 at KARE.
- ✓ Participated in one week International Level Faculty Development Programme (Virtual Mode) on Introduction to Artificial Intelligence held during 9th October 2023, organized by Department of Electrical and Electronics Engineering in Association with Department of Emerging Technologies in Computer Science, Department of Electronics and Communications Engineering and NI LABVIEW Academy.
- ✓ Participated in the Online One Week Faculty Development Program on Electric Vehicle Technology organized by the department of Electrical and Electronics Engineering, Velammal College of Engineering and Technology from 09.10.2023 to 13.10.2023.

- ✓ Successfully completed 21 days master class on Deep learning at Pantech Learning Pvt Ltd from 28.09.2023 to 18.10.2023.
- ✓ Participated in the 7 Days Online International Faculty Development Program on Latest Trends and Techniques in Software Engineering: An Industry Perspective organized by the Department of Computer Science, Christ (Deemed to be University), Bangalore during 20.01.2024 to 27.01.2024.
- ✓ Participated and completed. AICTE Training and Learning (ATAL) Academy Faculty Development Program on Big data analytics for Smart Grid at SCAD College of Engineering and Technology from 05.08.2024 to 10.08.2024.

NPTEL Courses Completed:

- ✓ Successfully completed NPTEL Online Certification course Fundamentals of Electrical Engineering
- ✓ Successfully completed the course Introduction on Intellectual Property to Engineers and Technologists.
- ✓ Successfully completed the course Introduction to Machine Learning (Tamil).
- ✓ Successfully completed the course Managing Intellectual Property in Universities (ELITE SILVER).
- ✓ Successfully completed the course Intellectual Property (ELITE SILVER).
- ✓ Successfully completed the course Teaching And Learning in Engineering (TALE) (ELITE SILVER).
- ✓ Successfully completed the course Technical Communication for Engineers (ELITE GOLD).
- ✓ Successfully completed the course Introduction to Internet of Things (ELITE SILVER).

Additional Responsibilities:

- ✓ ISO coordinator for Electrical and Electronics Engineering department. (ISO 9001:2015 Certified Internal Auditor).
- ✓ Class Advisor for UG Classes.
- ✓ NAAC – Criteria 6 In-charge.

Research and Project Details:

Ph.D. Thesis:

- ✓ Design and Development of Energy Efficient Converters for Solar fed Electric Vehicle

M.E-CIE

- ✓ Online Concrete Corrosion Monitoring System in Semiconductor Oxide Reference Electrode

B.E-ICE

- ✓ Railway track Snap notification.

Achievements:

- ✓ Participated and received prizes in many competitions in both school & college.
- ✓ Participated in school level science exhibition.

- ✓ Won I Prize in Tennikoit and Throwball game played at SPORTSMEET 2K'17 organized by National College of Engineering, Maruthakulam, Tirnelveli, TamilNadu.

Personal Details:

Father's Name	:Sheriff AhamedA.
Mother's Name	:Saira BanuS.
Date of Birth/Age	:11 th May1991/33
Gender	:Female.
Marital Status	:Married
Husband's Name	:Niyas AhamedA
Nationality	:Indian.
Strengths	:Adaptable, Problem Solving.
Linguistics	:Tamil, English
Religion	:Muslim

Declaration:

I do hereby declare that the particulars of information stated above are true, correct and complete to the best of my knowledge and belief.

Date:

Place: Tirunelveli

(NAZRIN SALMA S)