




# SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution| Accredited with 'A++' Grade by NAAC)

Pulloor, Kariapatti –Taluk. Virudhunagar Dist-626115.



<u>Department of</u>				
<b>Name</b>	Dr.G.Susan shiny			
<b>Date of Birth</b>	10.01.1987			
<b>Unique ID</b>	1-734274886			
<b>Educational Qualifications</b>	B.Tech(IT).,M.E(CSE).,Ph.D			
<b>Designation</b>	ASSOCIATE PROFESSOR			
<b>Email ID</b>	susanshiny@sethu.ac.in			
<b>Experience</b>	Industry	Teaching	Others	Total
	-	14+ Years	-	14+Years
<b>Date of Joining the Institution</b>	03.07.2019			
<b>Area of Specialization</b>	<b>Wireless Sensor Networks, IoT, Artificial Intelligence</b>			
<b>Courses taught</b>	Object Oriented Programming in C++,Python Programming, Java Programming, C Programming, Data Structures, Computer Networks			
<b>Research Focus</b>	<b>IoT, Artificial Intelligence</b>			
<b>Research guidance (Number of Scholars)</b>	Nil			
<b>Subject Competency</b>	Object Oriented Programming in C++,Python Programming, Java Programming			
<b>No. of papers published</b>	National Journals		International Journals	
	-		12	
<b>PG Specialization</b>	Computer Science and Engineering			
	Information and Communication Engineering			
<b>Projects Carried out</b>	<ul style="list-style-type: none"><li>• <b>Capacity Building Training for Women under Unnat Bharat Abhiyan Scheme in 2024</b></li><li>• <b>Guided and developed Prototype with student team for the skill development of ASD children</b></li></ul>			
<b>Patents (Filed &amp; Granted)</b>	04			
<b>Technology Transfer</b>	2 <ul style="list-style-type: none"><li>• <b>DigitALL</b></li><li>• Free Google certification courses are offered by <b>NASSCOM &amp; Our Shoulders Foundation</b></li></ul>			
<b>No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)</b>	03			





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## **Academic Credentials**

<b>Level</b>	<b>Degree</b>	<b>Specialization</b>	<b>University</b>	<b>Year of Completion</b>
UG	B.Tech	Information Technology	<b>Anna University Chennai</b>	2007
PG	M.E	Computer Science	<b>Anna University Thirunelveli</b>	2012
Ph.D.	Ph.D	Information and Communication Engineering	<b>Anna University</b>	2022

### **Details of Journal Publication:**

- Published paper in Journal of Big Data Technology and Business Analytics, MAT journals,” Smart Traffic Management: Enhancing Emergency Response with AI And IoT” e-ISSN: 2583-7834, Vol. 4, Issue 1 (January – April, 2025) pp: (36-44).
- Published paper in International Journal of Communication systems(Wiley), ”Energy Efficient Data Dissemination in Wireless Sensor Network Enabled IoT using Domain-Adaptive Message Passing graph Neural Networks”, 21.05.2024. <https://doi.org/10.1002/dac.5825>((**SCI INDEXED**))
- Published a book chapter “Prediction of COVID stages using data analysis and machine learning” in Intelligent systems and sustainable computational models, CRC Press,Taylor & Francis. **DOI: 10.1201/9781003407959 (SCOPUS INDEXED)**
- E2IA-HWSN: Energy Efficient Dual Intelligent Agents based Data Gathering and Emergency Event Delivery in Heterogeneous WSN Enabled IoT, G Susan Shiny, B Muthu Kumar, 2022/1, Wireless Personal Communications, Vol.122,Issue.1(**SCI INDEXED**)
- Agent Based Optimized EL-ABC Protocol for Energy Efficient Wireless Sensor Networks, Dr.B.Muthu Kumar G.Susan shiny, 2018/6, sylwan, Vol.162,Issue.6(**SCI INDEXED**)
- Published paper in Journal of Ubiquitous Computing and communication Technologies, ”Driver Safety system using Arduino, ”Dr.G.Susan shiny, G.Rajalakshmi, (ISSN: 2582-337X), September 2023, Volume 5, Issue 3, Pages 280-290, DOI: <https://doi.org/10.36548/jucct.2023.3.003>
- Published paper in an International journal IJETCSE, ”Intelligent Vehicle damage assessment and cost estimator Insurance”, April 2023, Vol-30, Issue-03, ISSN:0976-1353
- Heterogeneous wireless sensor networks (HWSN) and its energy efficient protocols A correlative study, G Susan Shiny, J Ragaventhiran, M Islabudeen, G Sharmila, B Muthu Kumar, 2021/4/3, Materials Today: Proceedings, Elsevier
- Energy Efficiency in Heterogeneous Wireless Sensor Network using Multiple Mobile Sinks, Susan Shiny G Priya s, Swetha V R, Thaslim Rakshana M, Vimala Devi P K, 2019/3, SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE),
- Published paper in international conference seventh sense research group paper titled”Energy efficiency in heterogeneous Wireless sensor Network Using Multiple mobile sinks”march 2019,page:57-59, ISSN: 2348 – 8387.
- Published paper in an international journal titled” Smart Dustbin-Wet and Dry(Metal) Waste Segregator with Alert System”,IJCRT,vol 6,issue 1,march 2018, ISSN: 2320-2882,page:931-934,IF:7.9

- Published paper in international conference titled "Fault Tolerance and Redundancy Reduction in Wireless Sensor Networks".
- A Survey on Energy Efficient Network Based Hierarchical Routing Protocols, Dr. T. Joshva Devadas Susan Shiny. G, 2017/6, International Journal of Recent Engineering Research and Development (IJRERD), Vol.2,Issue.6
- Fault tolerance And Redundancy Reduction In Wireless Sensor Networks, SUSAN SHINY. G, 2015/6, International Journal Of Advances In Management,Technology and Engineering Sciences. Vol.4,Issue.9(1)
- Fuzzy Based Intelligent Navigation System for Predicting the Behavior of Drunken Drivers, I Sakthidevi, T Joshva Devadas, G Susan Shiny, 2014/2/1, Fuzzy Systems,Vol.6,Issue.1,IF:0.4,ISSN-0974-9608

#### **Details of Conference attended:**

- Published Paper "Revolutionizing Aquaculture Practices:IoT and Deep learning –Based remote monitoring for sustainable fish farming" in the 5<sup>th</sup> International conference on Smart Electronics and Communication(ICOSEC 2024) -IEEE Xplore, 2024, pp. 535-541, doi: 10.1109/ICOSEC61587.2024.10722054. **(SCOPUS INDEXED)**
- Published Paper "Enhancing Lung Disease Identification with Multimodal data fusion and a deep-learning CNN approach" in the 5<sup>th</sup> International conference on Smart Electronics and Communication(ICOSEC 2024) and will be published in -IEEE Xplore,2024, pp. 535-541, doi: 10.1109/ICOSEC61587.2024.10722054. **(SCOPUS INDEXED)**
- Presented a paper "Buddy Blend Interactive Playmate for the skill development of ASD children "in a National Conference on Recent Trends in Analytics and Computing Technologies –RTACT 2024 held on 15<sup>th</sup> March, organized by the department of AR/VR, Institute of CSE,SIMATS Engineering,Chennai.
- Presented Paper in an International conference on "Emerging trends in Information and Communication Technologies-ETICT 2K23,Department of ECE, Sethu Institute of Technology during 5<sup>th</sup> & 6<sup>th</sup> April,2023, "Voice controlled smart wheel chair with automatic medicine dispenser" ,Dr.A.Hylis Sharon Magdalene,Dr.G.Susan shiny,Mrs.G.Rajalakshimi.
- Presented Paper in an International conference on "Emerging trends in Information and Communication Technologies-ETICT 2K23,Department of ECE, Sethu Institute of Technology during 5<sup>th</sup> & 6<sup>th</sup> April,2023, "Autonomous Vaccum Cleaning Robot", Dr.G.Susan shiny, Mrs.G.Rajalakshimi,Dr.A.Hylis Sharon Magdalene.
- Presented Paper in an International conference on "Emerging trends in Information and Communication Technologies-ETICT 2K23,Department of ECE, Sethu Institute of Technology during 5<sup>th</sup> & 6<sup>th</sup> April,2023, "Driver safety system", Dr.G.Susan shiny, Mrs.G.Rajalakshimi.
- Presented Paper in an International conference on "Emerging trends in Information and Communication Technologies-ETICT 2K23,Department of ECE, Sethu Institute of Technology during 5<sup>th</sup> & 6<sup>th</sup> April,2023, "Railway Track Object & Crack Detection", Dr.G.Susan shiny,Mrs.G.Rajalakshimi, Dr.A.Hylis Sharon Magdalene.
- Presented Paper in an International conference on "Emerging trends in Information and Communication Technologies-ETICT 2K23,Department of ECE, Sethu Institute of Technology during 5<sup>th</sup> & 6<sup>th</sup> April,2023, "Smart Jacket for Bike Rider's Saftey", Dr.G.Susan shiny, Dr.A.Hylis Sharon Magdalene, Mrs.G.Rajalakshimi.
- Published paper in international conference seventh sense research group paper titled"Energy efficiency in heterogeneous Wireless sensor Network Using Multiple mobile sinks"march 2019,page:57-59, ISSN: 2348 – 8387.
- Published paper in international conference titled "Fault Tolerance and Redundancy Reduction in Wireless Sensor Networks".
- Published paper in international conference and CIIT journal titled "Fuzzy Based Intelligent Navigation system for Predicting the Behavior of Drunken drivers ".

### **Details of Book Chapter and Books Published:**

- Published a book titled “Operating Systems”, ISBN: 978-93-86537-85-0, Shanlax Publications, 2017
- Published a book titled ”Big Data Analytics”, Forschung Publications, Chennai, 2019, ISBN: 978-93-87865-07-5
- Published a book titled ”Service Oriented Architecture”, Shanlax Publications, 2015
- Published a book chapter “Prediction of COVID stages using data analysis and machine learning” in Intelligent systems and sustainable computational models, CRC Press, Taylor & Francis. **DOI: 10.1201/9781003407959 (SCOPUS INDEXED)**

### **Details of Patents Filed and Granted:**

1. Published patent on “Childrearing Support system and Infant sensor device using IoT”, Application No: 202041055662 A, date of filing: 22/12/2020 Publication Date: 22/01/2021.
2. Published patent on “Neural network-based Predictive maintenance for IoT-Connected Industrial Equipment, Application No: 202341073629 , date of filing: 29/10/2023, Publication Date: 15/12/2023
3. Published design patent with grant date on “Advanced Smart City Infrastructure Monitoring Device”, Application No: 6396523, date of registration : 09 October 2024 & date of grant : 14 October 2024.
4. Published a UK design and grant patent on “Wearable computer for secure task management” , Application No: 6439727, Date of Registration 27.04.2025 & Date of grant : 07.05.2025.

### **Expert Lecture Delivered:**

- Invited as a Resource Person, Evaluator for the Paper Presentation contest and delivered a lecture on “Cyber Security Threat” in National level symposium held on 1<sup>st</sup> March 2023 at Caussanel College of Arts & Science, Muthupettai, Ramanathapuram.
- Acted as a resource person in a FDP on “Generative AI on Engineering: From Ideas to Building Model”, in JBREC college, Hyderabad on 8.03.2025 and 10.03.2025.
- Acted as a resource person in a FDP on “Advanced AI Tools for Preparing Research”, in R.L Jallapa Institute of Technology college, Karnataka on 2.04.2025.
- Acted as a resource person in a FDP on “AI Tools in Business Management”, in VLB Janakiammal College of Arts and Science college, Karnataka on 26.03.2025.