CURRICULUM VITAE

Dr. X.MERCILIN RAAJINI   M.E.,Ph.D.
Professor,
Department of Electronics and Communication
Engineering
Prince Shri Venkateshwara Padmavathy
Engineering College, Chennai, Tamilnadu

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PERSONAL INFORMATION

Full Name	**X.MERCILIN RAAJINI**
Father's Name	V.XAVIER IRUDAYA RAJ
Gender	Female
D.O.B	24.05.1980 (44 years)
Place of birth and Nationality	Tirunelveli, Tamilnadu / Indian
Email	raajii.mercy@gmail.com
Marital status	Married
Working address	**Department of Electronics and Communication Engineering.** Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai, India.

RESEARCH INTERESTS

Digital Signal Processing, Internet of Things(IoT), Wireless sensor networks , Communication networks

EDUCATION AND QUALIFICATIONS

Degree	Institute	University	Year of completion	% Secured
Postdoctoral Researcher **Topic :** Sustainable Solutions through Energy-Efficient Strategies in Next-Generation Communication Networks	University of South Florida	University of South Florida	Pursuing	-
Ph.D under Faculty of Electrical engineering. **Thesis Title**: Enhanced routing techniques for energy management in Wireless Sensor Network.	MIT campus	Anna University Chennai, India	2016	-
M.E Power Electronics and Drives.	Government College of Engineering,	Anna university, Chennai,	2007	82.2

		Tirunelveli	India		
B.E Electronics and Communication Engineering		Noorul Islam College of Engineering, Thuckalay	Manonmanium Sundaranar University.	2001	75.6

WORK EXPERIENCE

S.No	Designation	Name Of The College	From	To	Experience		
					Years	Months	Days
1	Professor	Prince Shri Venkateshwara Padmavathy Engineering College , Chennai.	03.06.2024	Till Date	1	1	25
2	Associate Professor	Prince Shri Venkateshwara Padmavathy Engineering College , Chennai.	02.01.2018	01.06.2024	6	4	31
3	Assistant Professor	G.K.M College of Engineering and Technology, Chennai	19.01.2011	06.112015	4	9	19
4	Senior Lecturer	Sree Sastha Institute of Engineeringand Technology, Chennai	13.06.2008	02.11.2010	2	4	20
5	Lecturer	Hindustan College of Engineering, Chennai	09.07.2007	07.05.2008	-	9	30
6	Lecturer	PSN College of Engineering, Tirunelveli	03.09.2001	29.07.2005	3	10	27
Total Teaching Experience in Engineering colleges (as on 27.07.2025)					**18**	**9**	**5**

FUNDED PROJECTS

S.No	Title	Funded by	Duration	Status
1	Remote GSM module monitoring and photovoltaic system control	Tamil Nadu State Council for Science and Technology(TNSCST)/ Student Project Scheme	6 months	Completed
2	Fuel Briquettes from Agricultural Waste	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA Rs.1,00,000/- RP-03525G SBIN122190112411	1 year	Completed
3	Eco-Friendly Flower Pot Using Cow Dung and Agricultural Waste	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA Rs.1,00,000/- RP-03525G SBIN122190112412	1 year	Completed

4	Conference on "Strengthening Social Inclusion through Community Services and Innovation for Rural People in HEI's and its Impact in Education"	INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH Rs.1,50,000/- F. No: NIS/NS/190/IC/2022-23	2 days	completed
5	PMKVY 4.0 Pradhan Mandhiri Koushal Vikas Yojana	NSDC Rs.16,61,520/-	6 months	Completed
6	Scaling up UAVs for land administration: Towards the plateau of productivity	Vaayusastra Aerospace, IITM Research Park Rs.2,50,000/-	One year	Completed
7	Development of the analytical channel model for designing signal processing algorithms and evaluating the performance of wireless systems in Drones	Vaayusastra Aerospace, IITM Research Park Rs.2,15,000/-	One year	Completed
8	Design, Fabrication and Analysis of Light Weight Unmanned Air Vehicle (UAV)	Vaayusastra Aerospace, IITM Research Park Rs.2,25,000/-	One year	Completed
9	Solar Greenhouse Dryer 2023-2024	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA 1 lakh	One year	completed
10	TRAINING ON MUSHROOM CULTIVATION FOR RURAL COMMUNITY - Village Vengadamangalam 2024-2025	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA 1 lakh	One year	completed
11	Ethos in Technical Institutions - CAPACITY PROGRAM ON RESEARCH AND DEVELOPMENT PROJECTS FOR RURAL NEEDS - Vengadamangalam 2024-2025	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA 1 lakh	One year	completed
12	ATAL FDP on QUANTUM CONNECTIONS: EXPLORING INTERDISCIPLINARY APPLICATIONS AND	AICTE Rs.3,50,000/-	6 days	completed

	INSIGHTS Application No: 1714812937 August 19th 2024 to August 24th 2024			
13	"Semi Automatic Candle Making Machine" under SEG Liquid waste management, Unnat Bharat Abhiyan Project-No: RP-03525G,	INDIAN INSTITUTE OF TECHNOLOGY, DELHI SEG-UBA ==1 lakh==	1 year	completed
14	**"Women Entrepreneurship Development Programme"** under Innovation and Entrepreneurship Division Programme or Scheme : Science Technology and Innovation (STI) based Entrepreneurship Training Programme for **15 days**	DST ==Rs.2,00,000/-==	15 days	ongoing
15	AICTE IDEA Lab	AICTE Rs.30,00,000/-	2024-2025	ongoing
16	Makers Bhavan Foundation - Tinkerers Laboratory	MBF Rs.38,00,000/-	2024-2025	ongoing

ACHIEVEMENTS AND ACCOLADES

1.	Received **National level AICTE Lilavati Awards** 2020-2021 for implementing Science and Technology for rural women empowerment.
2.	Received **State Level Best NSS Program Officer Awar**d for the year 2021-2022
3.	Received **Best NSS Program Officer** award under Anna university for the year 2019-20 organized more than 200 welfare programs for students and society , Best unit awards 2021-2022,2022-2023
4.	Received **Best Paper Award** for the paper entitled "A Culture of Quality through IQAC : A Casestudy on accelerating growth an performance in PSVP Engineering College" in NAAC Sponsored NAtional conference on "A Paradigm Shift for Quality Sustenance in Higher Education through Accreditation" dated 10th-11th December 2021
5.	First Class with Distinction in both UG and PG Degree examinations.
6.	Received **Best Paper Award** for the paper entitled "A multi-objective routing optimization using swarm intelligence in IoT networks" in International Conference on Technology Innovation and Data Sciences, **Lincoln university, KL, Malaysia,** October 2019.
7.	**Coordinator** for Learning Engineering through Activity Program **(LEAP)** Project in Prince shri

	venkateshawara padmavathy engineering college from 2018. Collaboration with Vaayusastra Aerospace Pvt.Ltd, IITM Research Park.
8.	Coordinated **MoU** between Prince shri venkateshawara padmavathy engineering college and more than 100 industries for research collaboration.
9.	Coordinator of Unnath Bharath Abiyan **(UBA)**
10.	Authored a book THIRUMANITHI about **Transgender** in Tamil language
11.	Acted as primary evaluator in **Toycathon 2021 & Smart India Hackathon 2022**
12.	Faculty mentor for TI India Design Contest 2015
13.	Coordinated Braille day Programme on 04.01.2022 and launched a braille book "Internet of Things" through NSS
14.	Coordinated Innovative practices for Students
15.	Coordinating Intellectual Property Rights (450+ patents published, 4 granted)
16.	Coordinated faculties to publish technical books in Tamil (7 books) through Centre for Tamil Development
17.	Director for Research
18.	Initiated Maker Bhavan Foundation Tinkering Lab and implemented.
19.	MBF+ADDVERB Technologies Cobotic Arm Initiative
20.	100+ Technical Books in English got ISBN for faculties

RESEARCH PUBLICATIONS

S.NO	PUBLICATIONS		TOTAL
1.	Books	Authored books	04
		Edited books	01
2.	Patents	Published	20
		Granted	05
3.	Journals		18
4.	Conferences		19
5.	Book chapters		06
6.	Guest Editor – Journal special issue		01
	Google scholar Indexing		
	H-index		11
	i-10 index		12
	Citation		432

Authored Books: 04
1.	**Mercilin Raajini Xavier** and Rajesh Ganesan (2019), *Digital Signal Processing*, Scholar's press Germany ISBN: 9786138916291
2.	**Mercilin Raajini Xavier**, P Indumathi, R Rajakumar(2017), *Enhanced routing techniques for energy management in Wireless sensor network,* Scholar's press Germany, ISBN: 9783330653856
3.	Rajesh Ganesan, Vinayagasundaram Bala, and **Mercilin Raajini Xavier**(2017), *Trust Based Temporal Data Aggregation For Energy Constrained WSN*, Scholar's press Germany, ISBN:

	9783330652682
4.	**Mercilin Raajini Xavier(2021), Thirumanidhi திருமணிதி, Notion Press,** ISBN Number : 9781685091309

<table>
<tr><td colspan="2" align="center">Edited Books : 01</td></tr>
<tr><td>1.</td><td>G.Rajesh, X.Mercilin Raajini, and Dang Thi Thu Hien(2020), <i>Industry 4.0 Interoperability, Analytics, Security, and Case studies, CRC Press-Taylor & Francis Group, LLC ISBN: 978-0-367-50112-9</i></td></tr>
<tr><td colspan="2" align="center">Book Chapters: 06</td></tr>
<tr><td>1.</td><td>Veeralakshmi Ponnuramu , Latha Tamilselvan, X. Mercilin Raajini , Kavitha Karthikeyan , Syed Bilal Hussain Shah (2023) , "Confidentiality, integrity, authentication (CIA) model for secured storage and processing of personal health records using Merkle hash tree and recurrent neural networks (RNN)" in Innovations in Healthcare Informatics: From interoperability to data analysis,June 2023 , IET digital library. ISBN: 9781839534584 ; e-ISBN: 9781839534591 https://doi.org/10.1049/PBHE041E</td></tr>
<tr><td>2.</td><td>G. Rajesh, S.P. Preethi, R. Shanmuga Priya, L. Rajesh, X. Mercilin Raajini(2021), "Customer Behavior Prediction for E-Commerce Sites Using Machine Learning Techniques-An Investigation", in edited book Reinventing Manufacturing and Business Processes Through Artificial Intelligence (1st ed.). CRC Press. https://doi.org/10.1201/9781003145011.</td></tr>
<tr><td>3.</td><td>G. Rajesh, S. Karthika, J. Ashwinth, R. Shanmugapriya, X. Mercilin Raajini,"An Investigation on COVID 19 Using Big Data Analytics and Artificial Intelligence", in edited book Predictive and Preventive Measures for Covid-19 Pandemic, Springer, ISSN 2524-7565 ISSN 2524-7573 (electronic) Algorithms for Intelligent Systems ISBN 978-981-33-4235-4 ISBN 978-981-33-4236-1 (eBook)</td></tr>
<tr><td>4.</td><td>Siva Sangari ,A.Ananthi, D.Deepa, Rajesh G and X.Mercilin Raajini(2020), Security and Privacy In Wireless Body Sensor Networks using Light Weight Cryptography Scheme, in edited book titled Security and privacy issues in IoT devices and sensor networks,Elsevier,ISBN 978-0-12-821255-4 , 1 January 2020, Pages 43-59, DOI: 10.1016/B978-0-12-821255-4.00003-1</td></tr>
<tr><td>5.</td><td>G.Rajesh, X.Mercilin Raajini, K.MartinSagayam, A. Sivasangari and Lawrence Henesey (2020), <i>EELC: Energy Efficient Light-Weight Cryptography for IoT networks</i>, in edited book titled Security and privacy issues in IoT devices and sensor networks,Elsevier,ISBN 978-0-12-821255-4.</td></tr>
<tr><td>6.</td><td>Ganesan Rajesh, X Mercilin Raajini, R Ashoka Rajan, M Gokuldhev, C Swetha,(2020) "A Multi-objective Routing Optimization Using Swarm Intelligence in IoT Networks" , springer, pages 603-613.</td></tr>
<tr><td colspan="2" align="center">WEB OF SCIENCE INDEXED (SCI/SCIE/ESCI/UGC) : 07</td></tr>
<tr><td>1.</td><td>Raajini M.X, Rajesh, G (2024) "Meta-Heuristic Solution for Route Optimization in Underwater Wireless Sensor Networks for Marine Applications", Journal of Scientific and Industrial Research, Volume 83, Issue 4, April 2024, Pages 405-413 (Science Citation Index Expanded)
Link : https://or.niscpr.res.in/index.php/JSIR/article/view/2936</td></tr>
<tr><td>2.</td><td>Rajesh, G., Raajini, X.M., Kritika, N., Kavinkumar, A., Sagayam, K.M., Som, M.M., Wahab, M.H.A. (2022)"Achieving Longevity in Wireless Body Area Network by Efficient Transmission Power Control for IoMT Applications" International Journal of Integrated Engineering, Volume 14, Issue 3, 2022, Pages 80-89, DOI: 10.30880/ijie.2022.14.03.009 (Emerging Sources Citation Index)
Link : https://publisher.uthm.edu.my/ojs/index.php/ijie/article/view/9137</td></tr>
</table>

3.	Kavitha Karthikeyan , X Mercilin Raajini , K K Senthil Kumar , G Indira(2021) "CULTURE OF QUALITY THROUGH IQAC: A CASE STUDY ON ACCELERATING GROWTH AND PERFORMANCE IN PSVP ENGINEERING COLLEGE", Vidyabharati International Interdisciplinary Research Journal, Special Issue on Engineering Technologies and Management, ISSN 2319-4979 pp 4668-4681.
4.	Wang, Yu Rajesh, G**. Mercilin Raajini, X**. Kritika, N. Kavinkumar, A. Shah, Syed Bilal Hussainc(2021) ,"Machine Learning-based Ship Detection and Tracking Using Satellite Images for Maritime Surveillance", Journal of Ambient Intelligence and Smart Environments, vol. 13, no. 5, pp. 361-371, sep 2021, DOI: 10.3233/AIS-210610.(Science Citation Index Expanded) Link : https://journals.sagepub.com/doi/abs/10.3233/AIS-210610
5.	Rajesh Ganesan, **X. Mercilin Raajini** , Anand Nayyar , Padmanaban Sanjeevikumar , Eklas Hossain and Ahmet H. Ertas (2020), "BOLD: Bio-Inspired Optimized Leader Election for Multiple Drones", *Sensors* **2020**, *20*(11), 3134; https://doi.org/10.3390/s20113134, VOL 20 ,issue 11(June 2020). (Science Citation Index Expanded) https://www.mdpi.com/1424-8220/20/11/3134
6.	Ganesan RAJESH, **Xavier MerciliniRaajini(2020)**, Kulandairaj Martin SAGAYAM , Bharat BHUSHAN , Utku KOSE, " *Fuzzy genetic based dynamic spectrum allocation (FGDSA) approach for 2 cognitive radio sensor networks*" Turk J Elec Eng & Comp Sci, VOL 28,ISSUE 5(Jan 2020), Pages 2416-2432, DOI: 10.3906/ELK-1907-206. (Science Citation Index Expanded) https://journals.tubitak.gov.tr/elektrik/vol28/iss5/4/
7.	G.Rajesh, **X.MercilinRaajini**, B. Vinayagasundaram, "*Fuzzy trust based aggregator sensor node election in internet of things (FTBA)*", International Journal of Internet Protocol Technology, published by Inderscience publishers. Vol. 9, Issue 2, pp. 151-160 (2016).**(SCIE)** **https://www.inderscience.com/info/inarticle.php?artid=79550** **(Emerging Sources Citation Index)**
	SCOPUS INDEXED: 06
8.	G Rajesh, **X Mercilin Raajini**, K Martin Sagayam, Hien Dang (2020), "A statistical approach for high order epistasis interaction detection for prediction of diabetic macular edema" , Informatics in Medicine Unlocked,Elsevier, Volume 20, June 2020, DOI: 10.1016/j.imu.2020.100362 (Scopus) https://www.sciencedirect.com/journal/informatics-in-medicine-unlocked/vol/20/suppl/C
9.	L. Rajesh, G. Rajesh, **X. Mercilin Raajini**, K. Martin Sagayam, MohdHelmyAbdWahab, Nabihah Ahmad (2020), "*Analysis and Synthesis of Energy Efficient Techniques in Cloud Computing*", International Journal of Emerging Trends in Engineering Research,vol 8,issue 8,Aug 2020,pages 4671-4680.
10.	**X. Mercilin Raajini**, R. Raja Kumar, P. Indumathi, V. Praveen(2015), "*Grey-wolf optimization approach for routing in dynamic wireless sensor network*", International journal of applied engineering research, vol 10, no 32.(discontinued from scopus as of 2017)
11.	**X. Mercilin Raajini**, R. Raja Kumar, P. Indumathi, V. Praveen(2015), "*Game theory based diligent energy utilization algorithm for routing in wireless sensor network*" , World Academy of Science, Engineering and Technology , International Journal of Computer, Electrical, Automation, Control and Information Engineering Vol:9, No:3. https://publications.waset.org/vol/99
12.	**Mercilin Raajini X** , Rajakumar R,Indumathi P(2015)," *Fuzzy Based Faulty Link Isolation Technique in Dynamic Wireless Sensor Networks*" WSEAS TRANSACTIONS on COMPUTERS, vol 14, pp 97-106. **(google scholar)**
13.	**Mercilin Raajini.X**, Indumathi.P, Ashwinth.J (2012)," *A Spatio-Temporal Data Aggregation*

	Scheme for Wireless Sensor Networks", European Journal of Scientific Research, Vol.74 No.4 (2012), pp. 516-526. **(google scholar)**	

14.	P.Kaoushik, S.Pravin Mukkesh,**X.Mercilin Raajini** (2022),"OXYGEN COLLECTION FROM POLYHOUSE FARMING",International Journal of Early Childhood Special Education (INT-JECSE),DOI:10.9756/INTJECSE/V14I5.23 ISSN: 1308-5581 Vol 14, Issue 05 2022, pg 251-260
15.	Mounica.T.R, Priyanka.V,**Mercilin Raajini.X (2019)**," Single Stage and Multi-level Power Electronic Inverter based power supply for resistive load" , IJARIIE , *ISSN(O)-2395-4396, Vol-5 Issue-2 April 2019,pp 1493-1497* .
16.	**X.Mercilin Raajini** , G.Rajesh , V.P. Arun Pandian, N.Vengadesh(2018)**, "***Arduino Based Smart blackboard wiping system ",* Journal of current research in engineering and science , vol 1, pg no 16-22,2018.
17.	Rekha V, **X.Mercilin Raajini (2014),"** *Navigation and Voice Recognition Robotic Dog Guides for Visually Impaired People with Multidegrees of Freedom" ,* International Journal of Emerging Technology & Research,vol1 , issue 4.
18.	R.Sajana, **X.Mercilin Raajini (2014),"** *Performance of Beacon Message Communication between Vehicle to Vehicle and Roadside Assistance",* International Journal of Emerging Technology & Research,vol1 , issue 4.

1	**Title of Invention:** Zero powered motor **Application No.:** 202041021841 **Field of Invention:** Electrical **Publication date :** 12/06/2020	**Publication Number**: 24/2020 **Agency:** Intellectual Property India, Government of India. Status: Published
2	**Title of Invention:** System and method for remote proctoring **Application No.:** 202041026134A **Field of Invention:** computer science **Publication date :** 10/07/2020	**Publication Number**: 28/2020 **Page Number:** 25960 **Agency:** Intellectual Property India, Government of India. Status: Published
3	**Title of Invention:** A SYSTEMATIC VISION BASED HAND GESTURE MOTION IDENTIFY TO ENABLED OF HOME AUTOMATION USING IOT **Application No.:** 202241001748 A **Field of Invention:** computer science **Publication date :** 28/01/2022	**Publication Number**: 04/2022 **Page Number: 4563** **Agency:** Intellectual Property India, Government of India. Status: Published
4	**Title of Invention:** SMART DUSTER **Application No.:** 202241009157 A **Field of Invention:** MECHANICAL ENGINEERING **Publication date :** 04/03/2022	**Publication Number**: 09/2022 **Page Number:** 12432 **Agency:** Intellectual Property India, Government of India. Status: Published
5	**Title of Invention:** PROTECTING SENSITIVE INFORMATION FOR BIG DATA IN HEATHCARE **Application No.:** 202241013667 A **Field of Invention: computer science** **Publication date :** 18/03/2022	**Publication Number**: 11/2022 **Page Number: 16627** **Agency:** Intellectual Property India, Government of India. Status: Published
6	**Title of Invention: Eco friendly Chalkboard Duster**	**Agency:** Intellectual Property India, Government of India.

	Application No.: 363140-001	Status: At technicalexaminationof amended application
7	**Title of Invention:** Built-in Door Stopper **Application No.:** 202241049066 **Publication date :** 16/09/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
8	**Title of Invention:** OXYGEN COLLECTIVE SYSTEM **Application No.:** 202241039005 **Publication date :** 15/07/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
9	**Title of Invention:** A1 Pencil **Application No.:** 367057-001	**Agency:** Intellectual Property India, Government of India. Status: Application under progress (waiting for technical examination)
10	**Title of Invention:** knee supporter **Application No.:** 367501-001	**Agency:** Intellectual Property India, Government of India. Status: Application under progress (waiting for technical examination)
11	**Title of Invention:** AUTOMATED PORTABLE KASHAYAM MAKER **Application No.:** 202241044112 **Publication date :** 6/08/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
12	**Title of Invention:** TWO- WAY MOBILE COMMUNICATION (G2C AND C2G) FOR DISSEMINATION OF FLOOD FORECASTS **Application No.:** 202241043644 **Publication date :** 19/08/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
13	**Title of Invention:** BLADELESS WIND MILL USING LINEAR ALTERNATOR **Application No.:** 202241046947 **Publication date :** 26/08/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
14	**Title of Invention:** Piezoelectric energy harvesting from floor mat **Application No.:** 202241045036 **Publication date :** 19/08/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
15	**Title of Invention:** EXOSKELETON BASED PNEUMATIC SUPPORT SETUP **Application No.:** 202241046979 **Publication date :** 26/08/2022	**Agency:** Intellectual Property India, Government of India. Status: Published
	PATENT PUBLISHED & GRANTED	
1	**Title of Invention:** Bladeless Wind Turbine **Application No.:** 360032-001 **Publication date :** 17/06/2022 Cert no:115164	**Agency:** Intellectual Property India, Government of India. Status: Applicationaccepted and published and Granted
2	**Title of Invention:** Smart Sewing Machine **Application No.:** 364381-001 **Publication Date** : 18.05.2022 Certificate number :116937	**Agency:** Intellectual Property India, Government of India. Status: Published & Granted

3	**Title of Invention:** Smart Watch **Application No.:** 358386-001 **Date : 11.02.2022** **Certificate number :129052**	**Agency:** Intellectual Property India, Government of India. Status: Published and Granted
4	**Title of Invention:** A1 Pencil **Application No.:** 367057-001 **Date : 30.06.2022** **Certificate number :139355**	**Agency:** Intellectual Property India, Government of India. Status: Published and Granted
5	**Title of Invention:** ECO FRIENDLY CHALKBOARD DUSTER **Application No.:** 363140-001 **Date : 26.04.2022** **Certificate number :164485**	**Agency:** Intellectual Property India, Government of India. Status: Published and Granted

Conferences : 19

1	Tamilselvi, M., Parameshwari, M.K., **Raajini, X.M**., Chamundeeswari, G., Kalaiselvi, K., Pandi, V.S. (2024) "IoT based Smart Robotic Design for Identifying Human Presence in Disaster Environments Using Intelligent Sensors", 2024 IEEE International Conference on Automation and Computation, AUTOCOM 2024; Dehradun; India; 14 March 2024 through 16 March 2024, DOI: 10.1109/AUTOCOM60220.2024.10486106
2	Geetha, R., Vijayanandh, T., Ananthi, S.N., **Mercilin Raajini X**., Divya Sundar, V.S., Kumari Deepika, P.(2024),"Enhanced Cybersecurity: Development and Evaluation of a Secure Data Sharing Paradigm Based on Blockchain Technology", 1st International Conference on Electronics, Communication and Signal Processing, ICECSP 2024; New Delhi; India; 8 August 2024 through 10 August 2024, DOI: 10.1109/ICECSP61809.2024.10698576
3	Dhabliya, D., Saxena, S., Ratna Raja Kumar, J., Kumar Pandey, D., Balaji, N.V., **Raajini, X.M.** (2024)"Exposing the Financial Impact of AI-Driven Data Analytics: A Cost-Benefit Analysis" 2nd World Conference on Communication and Computing, WCONF 2024; Raipur; India; 12 June 2024 through 14 June 2024; Category numberCFP24DU6-ART; Code 203116 , DOI: 10.1109/WCONF61366.2024.10692261
4	Rajesh G,Mercilin Raajini.X,Meyyappan S,Rajapriya R,Rozen Berg D,Logeshwaran K (2024)" Efficient Lightweight Blockchain Based Authentication and Intrusion Detection system for secure Message Transfer in VANETs", "2024 International Conference on Emerging Techniques in Computational Intelligence (ICETCI 2024)"22-24 August 2024. **DOI:** 10.1109/ICETCI62771.2024.10704123
5	Aravindan, M.K., Raajini, X.M., Ingle, Y.S., Jangid, P.K., Katyal, A., Naval, P. (2023),"Evaluation of Machine Learning Algorithms for Text Classification Tasks", 3rd International Conference on Smart Generation Computing, Communication and Networking, SMART GENCON 2023; Ghousia College of EngineeringBangalore; India; 29 December 2023 through 31 December 2023, DOI: 10.1109/SMARTGENCON60755.2023.10442925
6	Rao, M.V.N., Jasim, L., Singh, A.P., **Raajini, X.M**., Jothi, E. **(2023)** "AI-Based Learning Techniques for Bladder Cancer Detection" 4th International Conference on Computation, Automation and Knowledge Management, ICCAKM 2023; Dubai; United Arab Emirates; 12 December 2023 through 13 December 2023, DOI: 10.1109/ICCAKM58659.2023.10449515
7	**Mercilin Raajini, X**., Inamdar, F.M., Kannagi, A., Agrawal, T., Vishnoi, M., Yuvaraj, K. (2023)"Developing Novel Approaches for Implementing Machine Learning in Medicine", 3rd International Conference on Smart Generation Computing, Communication and Networking, SMART GENCON 2023; Ghousia College of EngineeringBangalore; India; 29 December 2023 through 31 December 2023

8	Mercilin Raajini, X., Deshmukh, G.B., Prabha, S., Singh, J., Agarwal, A., Manu, S.E.(2023) "Analyzing the Potential of Deep Learning for Enhancing Data Science Practices", 3rd International Conference on Smart Generation Computing, Communication and Networking, SMART GENCON 2023; Ghousia College of EngineeringBangalore; India; 29 December 2023 through 31 December 2023, DOI: 10.1109/SMARTGENCON60755.2023.10442264
9.	Bogiri, N., Sinha, S.K., Kaur, A., Singh, V., Bahri, D., **Raajini, X.M**.(2023)," Developing a Framework for Utilizing AI for Data Access Optimization", 3rd International Conference on Smart Generation Computing, Communication and Networking, SMART GENCON 2023; Ghousia College of EngineeringBangalore; India; 29 December 2023 through 31 December 2023, DOI: 10.1109/SMARTGENCON60755.2023.10441895
10.	Blessy, J.J., Sowmiya, A., Pandi, V.S., **Mercilin Raajini, X**., Richard, T., Rahul, S.(2023) ,"Design and Development of Electric Vehicles using Smart Charging with Battery Power Auto Cut-Off Facility", 2023 IEEE Global Conference on Information Technologies and Communications, GCITC 2023; Karnataka; India; 1 December 2023 through 3 December 2023, DOI: 10.1109/GCITC60406.2023.10426618
11.	**Mercilinraajini, X.,** Abirami, S., Keerthana, S.R., Shrivastava, N., Malokhat, N., Yokeshwaran, R.(2023), "MEM Based Hand Gesture Controlled Wireless Robot", 2023 International Conference on Newer Engineering Concepts and Technology, ICONNECT 2023; Tamil Nadu; India; 27 April 2023 through 28 April 2023, Volume 399, 12 July 2023, Article number 01013, E3S Web of Conferences, DOI: 10.1051/e3sconf/202339901013
12.	Kavitha Karthikeyan , **X Mercilin Raajini** , K K Senthil Kumar , G Indira(2021) "CULTURE OF QUALITY THROUGH IQAC: A CASE STUDY ON ACCELERATING GROWTH AND PERFORMANCE IN PSVP ENGINEERING COLLEGE",two days online national conference, K.D.K College of Engineering , Nagpur, NAAC Sponsored National Conference on " A Paradigm Shift for Quality Sustenance in Higher Education through Accreditation(NC-QEA-2021) from 10th to 11th December 2021.
13.	G.Rajesh, Rishikesh Narayanan Ramachandran, Karthik Srivatsan Vaidyanathan, Parthiban Suresh, **X.Mercilin Raajini** (2021), **"**Hybrid Neural Network for Handwritten Mathematical Expression Recognition system", International Conference on Intelligent Technology, System and Service for Internet of Everything (ITSS-IoE 2021), IEEE Conference, A Dual Mode (Webinar and F2F) Conference 1-2 November. UST-YEMEN, DOI: 10.1109/ITSS-IoE53029.2021.9615300.
14.	G. Rajesh**, X. Mercilin Raajini**, N. Kritika, A. Kavinkumar, K. Martin Sagayam, Mohamad Md. Som, and Mohd Helmy Abd Wahab (2020), "Achieving Longevity in Wireless Body Area Network by Efficient Transmission Power Control for IoMT Applications",Global Research Conference 2020,16th to 18th October 2020,Universiti Teknologi Mara.
15.	G.Rajesh**, X. Mercilin Raajini**, R.AshokaRajan, M.Gokuldhev.C. Swetha, **(2019)**"A multi-objective routing optimization using swarm intelligence in IoT networks" International Conference on Technology Innovation and Data Sciences, KL, Malaysia.
16.	G.Rajesh, T.Ramakrishnan, S.Shreevignesh, B.Vinayagasundaram, **X.MercilinRaajini**,**(2018)**" Achieving QoS in GSM Network by Efficient Anomaly Mitigation and Data Prediction Model", Ninth International Conference on Advanced Computing (ICoAC), India, 10th International Conference on Advanced Computing, ICoAC 2018; Chennai; India; 13 December 2018 through 15 December 2018, DOI: 10.1109/ICoAC44903.2018.8939086.
17.	**X.Mercilin Raajini(2015)** " *Grey-wolf optimization approach for routing in dynamic wireless sensor network*" in International conference on adaptive technologies for sustainable growth(ICATS-2015) on 29th and 30th may 2015.
18.	**X.Mercilin Raajini(2007)** ,"*New Architectures for Radio Frequency DC-DC Power Conversion" in the National Level Conference,*PEDC'07 organized by A.C College of Engineering &Technology,Karaikudi on march 14th 2007

19.	**X.Mercilin Raajini(2007)** ,"*A study on Harmful Effects of Mobile Phones and Wireless Devices*" in National Level conference conducted by Angalamman College of Engineering , Tiruchirappali,TN,India on 30th march 2007.

Reviewer/ Auditing/DC member /Editor/ Colloborations
Reviewer for IEEE Access, Elseiver(DCN), JCIT,-IGI Global, CRC Press, JENRS etc
Guest editor for special issue on **Transforming Technologies for Adopting Industry 4.0 in Journal of cases on Information Technology**, IGI Global, Published vol 23, Issue 3 , July-September 2021, eISSN 1548-7725
Acted as member for Anna University Academic COE auditing 2020
Doctoral Committee Member for AMET university.
Supervise MCA Distance education project, MIT Study Centre, Anna university.
Editorial member of Journal of Engineering Research and Sciences.

SUBJECTS TAUGHT

▪ Computer Networks	▪ Digital Signal Processing
▪ Adhoc Networks	▪ Internet of Things(IoT)
▪ Wireless sensor networks	▪ Microprocessor and Microcontrollers
▪ Cryptography and Network security	▪ Electronic Devices and Circuits
▪ Signals and Systems	▪ Linear Integrated Circuits
▪ Digital Electronics	▪ Embedded Communication and Software Design
▪ Microcontroller Based System Design	▪ Total Quality Management
▪ Programming for problem solving	▪ C programming

AWARDS

Award/ Honors	Awarded by	Year
Best Paper Award	K.D.K College of Engineering , Nagpur	2021
Best Paper Award	Lincoln university college, Malaysia	2019
Received best NSS unit award	Anna University	2018-2019
Best NSS Program Officer Award	Anna University	2019-2020
Lilavati Award for Technology development	AICTE	2020-2021
Best NSS unit award	Anna University	2021-2022
Best NSS Program Officer Award	Tamilnadu Government(State Level Award)	2021-2022

ADMINISTRATIVE DUTIES

Position	Centre/Department	Duration

Centre for Research	Prince Shri Venkateshwara Padmavathy Engineering	From 2022
Centre for Intellectual Property Rights	Prince Shri Venkateshwara Padmavathy Engineering	From 2022
Centre for Tamil Development	Prince Shri Venkateshwara Padmavathy Engineering	From 2022
Institute Innovation council(IIC) startup coordinator	Prince Shri Venkateshwara Padmavathy Engineering	From 2020
Incubation & Business Promotion cell convener	Prince Shri Venkateshwara Padmavathy Engineering	From 2020
NAAC	Prince Shri Venkateshwara Padmavathy Engineering	From 2020
Unnath Bharath Abiyan Coordinator	Prince Shri Venkateshwara Padmavathy Engineering College	2019 to till now
NSS Program Officer (trained)	Prince Shri Venkateshwara Padmavathy Engineering College	2019 to till now
Innovative cell member	Prince Shri Venkateshwara Padmavathy Engineering College	2019 to till now
R & D cell member	Department of EEE, GKM college of Engineering	2014-2015
M.E – EST Project Coordinator	Department of EEE, GKM college of Engineering	2014-2015
Library Incharge	Department of ECE, Hindustan College of Engineering Sree Sastha Institute of Engineering and Technology	2007-2008 2009-2010

PROFESSIONAL MEMBERSHIPS

Association	ID
Indian Society for Technical Education(ISTE)	LM126412
Institute for Engineering Research and Publication	PM54612970
International Association of Engineers (IAENG)	271201
SAEINDIA	7220410324

RESEARCHER PORTALS

Publons	https://publons.com/researcher/3841895/mercilin-raajini-xavier-irudaya-raj/
OrciD	https://orcid.org/0000-0001-9571-4353
Google scholar	https://scholar.google.com/citations?user=Zg6S0uYAAAAJ&hl=en
SCOPUS ID	57191440526
RESEARCHER ID	ABD-7644-2022

PROGRAMS ORGANIZED

S.No	Program	Role	Duration	Venue
1.	Faculty Development Training Programme for summer vacation 2014- EC6202 Electronic Devices and Circuits	Coordinator	16-22nd June 2014	Department of EEE GKM College Of Engineering
2.	2nd National level Conference RTEEE-2014	Coordinator	8th March 2014	Department of EEE GKM College Of Engineering
3.	NSS Special Camp at Advent Christian aided middle school, Ponmar.	NSS Program Officer	16.12.2019 to 22.12.2019	Prince Shri Venkateshwara Padmavathy Engineering College
4.	NSS regular activities around **100 activities**	NSS PO	2019- Till Date	Prince Shri Venkateshwara Padmavathy Engineering College
5.	Inititated LEAP(Learning Engineering through Activity Program) Project in Collaboration with Vaayusastra Aerospace Pvt.Ltd, IITM Research Park & Prof.Timothy A.Gonsalves, Founding Director, IIT Mandi	Coordinator and Mentor	From 03.09.2021	Prince Shri Venkateshwara Padmavathy Engineering College
6.	Coordinated NSS orientation Program for 2021-2025 Batch NSS volunteers on 02.12.2021 Chief guest : Dr.R.Ramesh, NSS Coordinator, Anna University	NSS Program Officer	02.12.2021	Prince Shri Venkateshwara Padmavathy Engineering College
7.	Act as a Primary Evaluator in Toycathon 2021	Evaluator	2021	Online mode AICTE Toycathon 2021
8.	Organized a FIT INDIA CHALLENGE program for institution level	Coordinator	2.12.2021	Prince Shri Venkateshwara Padmavathy Engineering College
9.	Co-convener for NAAC Sponsored two days national seminar on Role of IQAC in implementing innovative practices in teaching learning.	Co-Convener	27th & 28th April 2022	Online mode Prince Shri Venkateshwara Padmavathy Engineering College

10.	Coordinator for FACULTY DEVELOPMENT PROGRAMME(FDP) ON Emergence of Blockchain Technology and Cryptocurrencies Organized by National Institute of Technology, Warangal. Under the Scheme of Electronics & ICT Academy (Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)	Coordinator	02.05.2022 to 11.05.2022	Online mode Prince Shri Venkateshwara Padmavathy Engineering College
11.	Acted as an evaluator for Smart India Hackathon 2022	Evaluator	2022	AICTE
12.	Coordinator for Innovative Assignment Presentation	Coordinator	2022	Prince Shri Venkateshwara Padmavathy Engineering College.

CERTIFICATE COURSES

S.No	Course	Certifying authority	Duration	Score/ Status/Remarks
1.	Introduction to Internet of Things	NPTEL	12 weeks	1% topper Elite Gold)
2.	Electronic Systems for Cancer Diagnosis	NPTEL	12 weeks	Elite
3.	Digital signal processing 1 : Basic concepts and Algorithms	COURSERA		Completed on 14.6.2020
4.	Introduction to Internet of Things and Embedded Systems	COURSERA		Completed 06.04.2020
5.	Mathematics for Machine Learning : Linear Algebra	COURSERA		Completed 06.09.2020.

WORKSHOPS / SEMINARS / TRAINING ATTENDED

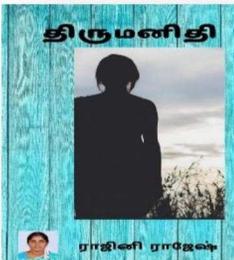| S.NO	NAME OF THE PROGRAMME	VENUE	DURATION
1.	Undergone Innovation Ambassador training (Foundation Level) conducted by MoE's Innovation Cell & AICTE	MoE's Innovation Cell & AICTE Online mode	30th June - 30th July 2021 in online mode.
2.	Faculty Development Programme on Electronic Circuits-I	MIT Campus , Anna University 24.05.2021 to 29.05. 2021	6 days

3.	Faculty Development Programme on Computer Networks	MIT Campus , Anna University 21.06.2021 to 26.06.2021	6 days
4.	Faculty Development Programme on Adhoc and Wireless Sensor Networks	Anna University Regional Campus, Coimbatore	6 days
5.	Short Term Training Program (STTP) on "IoT based WSN using COOJA Network Simulator"	IFET COLLEGE OF ENGINEERING 05.11.2020 to 11.11.2020	6 days
6.	One day training programme for NSS program officers	5th March 2020 at MIT campus, Anna University.	1 day
7.	NSS Orientation Course	Empanelled Training Instituition, Madras School of Social Work from 13.11.2019 to 19.11.2019	7 days
8.	STTP on SOFTWARE ENGINEERING	MIT Campus, Anna University from 16-12-2019 to 20-12-2019	5 days
9.	Workshop with Hands on Training in Basic Design on Embedded System Using 8051 Microcontroller	GKMCET during 01.04.2015 and 02.04.2015	2 days
10.	Workshop on Research Methodology	Anna University, 10.12.2014	1 day
11.	Workshop on LTE-A	MIT campus, Anna university on 10th and 11th October 2014.	2 days
12.	Workshop on MISSION 10X	WIPRO at Tagore Engineering College from 13th june 2011 to 17th june 2011.	5 days
13.	Workshop on Mobile Robots And Sensor Network	IIT Chennai 28.03.2011 to 01.04.2011	5 days
14.	workshop on Simulation of Advanced Networks Using NS-2	MIT Campus, Anna University 2.12.2011 to 3.12.2011	2 days
15.	workshop on Application Development Framework	GKMCET on 19.02.2011	1 day
16.	Workshop on MEMS & RTOS	GKMCET on 11.03.2011	1 day
17.	Seminar on Research Challenges In Wireless Sensor Networks	MIT Campus, Anna University 3.03. 2010	1 day
18.	Faculty development programme on "Soft Skills and Class Room Dynamics"	Hindustan College of Engineering, Chennai on 01.12.2007	1 day
19.	workshop on "Digital Image Processing and Its Applications"	Government College of Engineering, Tirunelveli on 6th and 7th march 2007.	2 days
20.	Workshop on "Embedded Controller for Special Machines-SRM"	Government College of Engineering, Tirunelveli on 1st and 2nd march 2007.	2 days
21.	Special lecture on "Power Electronics and Drives "	Alagappa Chettiar College of Engineering and Technolgy, Karaikudi on 6thoct 2006.	1 day
22.	workshop on "Dsp Controller for Special Machines-BLDC "	Government College of Engineering,Tirunelveli on 24th and 25th august 2006.	2 days
23.	workshop on "Power Electronics"	Government college of Engineering,Tirunelveli 0n 27th and 28thfeb 2006.	2 days

24.	Faculty Development Programme on "Signals and Systems "	Arulmigu Kalasalingam College of Engineering,Krishnankoil from 24th to 29th November 2003	6 days

CO-CURRICULAR ACTIVITIES ORGANIZED

S.no	Programs Organized	Date
1.	Organized Induction Program - An Inspiring Session on NSS activities at Prince "Reach out to Explore The NEW YOU!!"	29.10.2021
2.	Organized "FitIndia Walk/Run" at Ponmar	12.10.2021
3.	Yoga techniques to improve eyesight & Effective yoga asanas for irregular periods	From 14.09.2021 to till going on
4.	In Makkalai thedi maruthuvam collaboration with kelambakkam government hospital @ Ponmar	21.08.2021
5.	Swachh bharath activity "Campus Cleaning" at ponmar.	13.10.2021
6.	Webinar on Road safety awareness program in collaboration with Honda motor cycle and Chennai municipal corporation	26.05.2021
7.	AWARENESS PROGRAM ON GENDER EQUITY & HIV/AIDS (Mx.Aiswarya/Transgender)	27.04.2021 (Yearly once)
8.	Election Duty at Kancheepuram District collaboration with Police Department	06.04.2021
9.	Awareness poster campaign for voting	05.04.2021
10.	Book donation to Government school, Mambakkam	29.03.2021
11.	NSS Special Camp	16.12.2019 to 22.12.2019
12.	Veterinary Camp in collaboration with Madras Veterinary College for Ponmar People	29.02.2020
13.	Workshop on Child Abuse in colloboration with Sakshi NGO	14.03.2020
14.	Blood Donation Camp collaboration with Lions Club	15.02.2019

GENERAL BOOKS AUTHORED

	Book Title : **Thirumanidhi** திருமநிதி Theme : Transgender life style Publisher : Notion Press / July 2021 ISBN Number : 9781685091309

REFERENCES

Dr.V.Vaidhehi Vijayakumar Vice Chancellor of Mother Teresa Women's University, Former Dean, School of Computing Sciences and Engineering, VIT, Chennai	**Dr. S. Thamarai selvi** Vice Chancellor of Thiruvalluvar University, Vellore. Former Professor, Anna University **stselvi@annauniv.edu**
& Former Professor in Anna university. **vaidehivijay@gmail.com**	
Dr. Vishnu Karthik Vice chairman Prince Shri Venkateshwara Padmavathy Engineering College Chennai. vc@psvpec.in	**Dr. Timothy A. Gonsalves** Professor Emeritus (Hon.) Indian Institute of Technology Mandi **tag@iitmandi.ac.in**

I Declare that the Information given in the CV is correct to the best of my knowledge.

X.Mercilin Raajini