

CURRICULUM VITAE



Dr. A. VALARMATHI

Assistant Professor (Selection Grade)

Department of Computer Applications,

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Anna University, Chennai.

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Research Area:

❖ Artificial Intelligence, Cyber Security, Machine Learning, Wireless Networks, IOT

Educational Qualifications:

✚ **Ph.D. (Wireless Networks)**, Anna University Chennai.

✚ **MCA (Master of Computer Applications)**, Annamalai University, FC - First Class

✚ **M.Sc. (Computer Science)**, Bharathidasan University, FC - First Class

✚ **B.Sc. (Computer Science)**, Bharathidasan University, FC - First Class

Experience:

Name of Company/ Institutions	Designation of the Post	From	To	Experience in Year
UCE-BIT Campus, Anna University, Chennai	Assistant Professor (Sl. Gr)	2018	Till Date	7 years
UCE-BIT Campus, Anna University, Chennai	Assistant Professor (Sr. Gr)	2009	2013	4 years














Uce-bit campus, anna university, chennai	Assistant professor & head	2014	2018	4 years
UCE-BIT Campus, Anna University, Chennai	Lecturer	2009	2010	6 months

Professional Activities:

Membership In Professional Bodies:


IEEE (Institute of Electrical and Electronics Engineers), Computer Society of India (CSI), SRESA, IJCSNS

Awards:

-  Best Engineering Faculty, Enterprise Under Ministry Of MSME, Govt of India, 2024
-  Teaching Excellence Award, UN SDG, 2024
-  Awarded Best Teacher 2020,2021 & 2022, University College of Engineering, BIT Campus, Tiruchirappalli, Anna University, Chennai.
-  Awarded Topper (2%) in MOOC course conducted by NPTEL on cloud computing, 8 weeks, Aug to October 2021 with e-certificate and elite & Topper tag.
-  Awarded Top Performing Mentor from NPTEL (IIT-Madras) for mentoring students and research scholars for the course Internet of Things, December 2018.
-  Awarded Best Paper for a presentation made in ICCCI'11, Thiyagaraja College of Engineering, Madurai.
-  Received Certificate of Appreciation for designing the BIT Campus Website from BOG Members, Nov 2015.
-  Awarded Outstanding Women Achiever Award from Centre of Women Empowerment in the year 2016.
-  Received Certificate of Appreciation for designing the website for 3rd National seminar on Advanced Oxidation Processes organized by Dept of chemistry, BIT campus in association with Society for Environmental Chemistry and Allied Sciences, India, Dec 2017.
-  Certificate of Appreciation (Rehearsal Committee Coordinator) from The Head of the Institution, UCE-Tiruchirappalli.
-  Received Certificate of Appreciation for contributing as a technical committee chairman for “Installation and up-gradation of LAN and Wi-Fi” by TamilNadu National Law University, Tiruchirappalli, 24 Nov 2017-Mar 2017.
-  Received Certificate of Appreciation from the Commissioner of Police, Trichy city for designing and developing Trichy city Police website (<https://www.trichycitypolice.com/>), 2014.
-  Received Certificate of Appreciation for organizing a track on Big Data Analytics for Critical System in 1st International and 4th National conference on reliability and safety engineering organized by PDPM

Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India, 26-28, 2018.

 Awarded Best paper award in ICICCT, Anna University, Trichy.

 Nominated for Marquis Who's Who in 2011.

 Awarded District Second (Dindigul) in SSLC Examination 1992.

Additional/Academic Responsibilities at University:

S.No.	Name of the Post	From	To
1.	Placement Co-Coordinator	2022	Till date
2.	Head of the Dept/MCA	2014	2018
3.	Institute web Administrator	2016	2021
4.	TANCET Zonal Coordinator UCE, BIT campus, Trichy	2015	
5.	Chief Superintendent , UCE, BIT campus, Trichy	2018	
6.	Anna University Representative & Squad member - Anna University Examinations	2010 onwards	
7.	NBA Committee Institute level Accreditation verification process for CSE & IT	2013	
8.	NBA Committee (Institute level Informative Website) Member -2017(Institution Level).	2017	
9.	Graduation Committee (Coordinator - Rehearsal committee) (Institution Level).	2015 2018 2022	2017 2019 2023
10.	Affiliation inspection committee Member - Anna University Chennai	2015,2016,2017	
11.	Anti-ragging committee Member (Institution Level)	2017 2022	2018

Fellowships and Grants received:

S.No.	Title	Agency	Period	Grant/Amount Mobilized (Rs.in Lakhs)
1.	GIS Based Spatial Mining Of Soil Contamination Level In Cauvery Delta Region” From DST, New Delhi. (Principal Investigator)	DST	2018-2020	7,64,500/-

2.	Modernization In Bio-Informatics And Big Data" from DBT, New Delhi(Principal Investigator)	DST	2016	2,00,000/-
3.	Workshop on Web Services (Co-Investigator)	CSIR	2013	30,000/-

Research Scholars Fellowship

S.No.	Scholars	Title	Agency	Period	Grant/Amount Mobilized (Rs.in Lakhs)
1.	Faleela Farzana, Ph.D. (Full Time)	Maulana Azad National Fellowship For Minority students - Research Work On sensor network. Under The Guidance of Dr.A. Valarmathi.	UGC	2016 - 2020	24,000 Per Month

Completed U.G / P.G Projects:

Number of PG Projects Completed: **ME Projects Completed: 4 Nos**

MCA Project Completed: 50 Nos

Number of UG Project Completed: **2 Nos**

Research Guidance (M.S/Ph.D.) (Completed)

Ph.D.: Research Supervisor, Anna University, Chennai (from 2014 onwards)

Awarded: 9 Thesis Submitted: 1

Sl. No	Name of the scholar	Institution	Status
1.	Vaddi Naga padma prasuna	Anna University, Chennai	<u>Ph.D</u> Awarded(2018)
2.	Nalini S	Anna University, Chennai	<u>Ph.D</u> Awarded(2019)
3.	Uma Maheswari K	Anna University, Chennai	<u>Ph.D</u> Awarded(2019)
4.	Shanmugapriya S	Anna University, Chennai	<u>Ph.D</u> Awarded(2019)
5.	Faleela Farzana M	Anna University, Chennai	<u>Ph.D</u> Awarded(2020)

6.	Priyadharshini V M	Anna University, Chennai	<u>Ph.D</u> Awarded(2022)
7.	Jayamala R	Anna University, Chennai	<u>Ph.D</u> Awarded(2022)
8.	Monica Bhavani M	Anna University, Chennai	<u>Ph.D</u> Awarded(2022)
9.	Kavitha R	Anna University, Chennai	<u>Ph.D</u> Awarded(2023)

Research Guidance (M.S/Ph.D.) (Ongoing):

Sl. No	Name of the scholar	Institution	Status
1.	Kanimozhi C	Anna University, Chennai	Confirmation Completed
2.	Jayanthi	Anna University, Chennai	Thesis Submitted
3.	Geethanjali R	Anna University, Chennai	Thesis Submitted
4.	Saranya K	Anna University, Chennai	Confirmation Completed
5.	Satya R	Anna University, Chennai	Confirmation Completed

Publications:

a. Books / Book chapters:

BOOKS

1. Published "A Practical Approach to Web Programming Essentials" book with the ISBN No 978-93-81899-52-6.
2. Published "Visual Programming" book with the ISBN No 972-93-82899-52-1.
3. Editor: MAGCA (2013), Student magazine to publish their innovations.
4. EMCA (2011), National conference proceedings with ISBN Number.
5. **Editor, Society for Reliability and Safety**; Mumbai India; NCRS'14: SRESA national conference on reliability and safety engineering; Mumbai (India); 13-15 Feb 2014; ISBN 978-81-9211-284-8.

BOOK CHAPTERS:

1. IoT-Botnet Detection And Mitigation For Smart Health Care System Using Advanced Machine Learning Techniques, "**Blockchain Enabled Secure Smart Healthcare System Using Internet of**

Things," 2023, Bentham Science Publications (Scopus Indexed)

2. FSRmSTS—An Optimize Task Scheduling with a Hybrid Approach: Integrating FCFS, SJF, and RR with Median Standard Time Slice, R Jayamala, A Valarmathi, 2024/5/31, Studies in Big Data, **Volume** 151, **Year** 2024, **Pages** 133-149, [DOI:10.1007/978-981-97-2644-8_7](https://doi.org/10.1007/978-981-97-2644-8_7) , Springer Nature Singapore,2024 (Scopus Indexed)
3. Geethanjali, R., &Valarmathi, A. (2024). “**Sentiment Fusion: Leveraging Big Data and Deep Learning for Multimodal Sentiment Analysis in Social Networks.**” In Futuristic Trends in Computing Technologies and Data Sciences (Vol. 3, Book 3, pp. 193–206). IIP Series. DOI: <https://doi.org/10.58532/V3BFCT3P5CH1e> ISBN: 978-93-6252-901-5

b. International Journals:

	All	Since 2018
<u>Citations</u>	229	134
<u>h-index</u>	6	5
<u>i10-index</u>	5	3

SCOPUS INDEXED: 41

1. **A multilayer deep autoencoder approach for cross layer IoT attack detection using deep learning algorithms**, K., Saranya, K., A.T., Valarmathi, Anga Thevar, Scientific Reports, 2025
2. *A novel hybrid deep learning IChOA-CNN-LSTM model for modality-enriched and multilingual emotion recognition in social media*,mR., Geethanjali, R., A.T., Valarmathi, Anga Thevar,Scientific Reports, [DOI:10.1038/s41598-024-73452-2](https://doi.org/10.1038/s41598-024-73452-2) , **Volume** 14, **Year** 2024 .
3. *A Deep Learning based Hybrid Model for Maternal Health Risk Detection and Multifaceted Emotion Analysis in Social Networks*, R., Geethanjali, R., A.T., Valarmathi, Anga Thevar, *International Journal of Applied Mathematics and Computer Science*, **Volume** 34, **Year** 2024, **Pages** 565-577
[DOI:10.61822/amcs-2024-0038](https://doi.org/10.61822/amcs-2024-0038) ,2024
4. momorphic with Henon-Map Encryption over Medical Image Data Confidentiality in Cloud and Classifying Images Using Deep Learning Approaches in IoT, K Saranya, A Valarmathi, *Traitement du Signal* 42 (1), 29, 2024.
5. "A novel mechanism to recognize heart disease by optimized deep belief network with SVM classification" by Uma Maheswari, K. and **Valarmathi, A**, *Journal: Journal of Intelligent and Fuzzy Systems* Year: 2023 **Volume**: 44 **Issue**: 1 **Pages**: 167-184, 2023

6. Book Chapter: IoT-botnet detection and mitigation for smart healthcare systems using advanced machine learning techniques, S., Jayanthi, S., A.T., Valarmathi, Anga Thevar, 2023
7. "A security hybrid mechanism using fuzzy with adaptive ElGamal approach in cloud" by Kavitha, R. and **Valarmathi, A.** Journal: Article in Press Open access, 2023
8. "Retraction Note to: Smart city routing using GIS & VANET system" by Bhavani, M.M. and **Valarmathi, A.** Journal: Journal of Ambient Intelligence and Humanized Computing Year: 2022
9. "Adaptive Framework for Privacy Preserving in Online Social Networks" by Priyadharshini, V.M. and **Valarmathi, A.** Journal: Wireless Personal Communications Year: 2021 Volume: 121 Issue: 3 Pages: 2273-2290
10. "Smart city routing using GIS & VANET system" by Bhavani, M.M. and **Valarmathi, A.** Journal: Journal of Ambient Intelligence and Humanized Computing Year: 2021 Volume: 12 Issue: 5 Pages: 5679-5685
11. "A novel spam detection technique for detecting and classifying malicious profiles in online social networks" by Priyadharshini, V.M. and **Valarmathi, A.** Journal: Journal of Intelligent and Fuzzy Systems Year: 2021 Volume: 41 Issue: 1 Pages: 993-1007
12. "An enhanced decentralized virtual machine migration approach for energy-aware cloud data centers" by Jayamala, R. and **Valarmathi, A.** Journal: Intelligent Automation and Soft Computing Year: 2021 Volume: 27 Issue: 2 Pages: 347-358
13. "Secure architecture to circumvent collision using RSSI measurement in WSN: a cross layer design approach" by Faleela Farzana, M. and **Valarmathi, A.** Journal: Multimedia Tools and Applications Year: 2020 Volume: 79 Issues: 13-14 Pages: 8969-8984
14. "Optimal Traffic Route Finder System" by Monica Bhavani, M. and **Valarmathi, A.** Journal: Lecture Notes in Mechanical Engineering Year: 2020 Pages: 39-47
15. "The personal authentication service and security enhancement for optimal strong password" by ShanmugaPriya, S., **Valarmathi, A.**, and Yuvaraj, D. Journal: Concurrency and Computation: Practice and Experience Year: 2019 Issue: 10
16. "A novel feature selection algorithm for coronary artery disease prediction" by Uma Maheswari, K. and **Valarmathi, A.** Journal: Applied Mathematics and Information Sciences Year: 2018 Volume: 12 Issue: 4 Pages: 735-744
17. Shanmugapriya, A., & **Valarmathi, A.** (2018). Enhanced Mutual Authentication System In Mobile Cloud Environments. International Journal Of Engineering & Technology, 7(3.34), 192-197.

18. Shanmugapriya, S., **Valarmathi, A.** (2018). Efficient Fuzzy C-Means Based Multilevel Image Segmentation For Brain Tumor Detection In MR Images. *Design Automation For Embedded Systems*, 1-2, 81-93.
19. Shanmugapriya, A., & **Valarmathi, A.** (2017). Survey On Identification Of Brain Tumor Using Medical Image Segmentation And Edge Detection. *Advances In Natural And Applied Sciences*, 11(9), 297-302.
20. Monica Bhavani, M., **Valarmathi, A.**, & Gis Based Spatial Mining Of Gps Logs For Optimal Path Routing. *International Journal For Research In Applied Science & Engineering Technology (Ijrasnet)*.
21. Nalini, S., & **Valarmathi, A.** (2018). A Collaborative Composite Event Detection Approach In Wireless Sensor Network Using Fuzzy Assisted Decision System. *Applied Mathematics And Information Sciences*, 12(3), 567-577.
22. Vaddi Naga Padma Prasuna, **Valarmathi, A.**, & Arputha Vijaya Selvi, J. (2015). A Review Of Leach Protocol In Wireless Sensor Networks. *International Journal Of Applied Engineering Research*, 10(4), 9293-9308.
23. Vaddi Naga Padma Prasuna, A., **Valarmathi, A.**, Arputha Vijaya Selvi, J., & Senthil Pandian, P. (2016). A Trustworthy And Reliability Model For Reconfigurable Wireless Sensor Networks. *Middle-East Journal Of Scientific Research (Mejsr)*, 24(11), 3554-3559.
24. Uma Maheswari, K., **Valarmathi, A.**, & Jasmine, J. (2017). Effective Diagnosis Of Heart Disease Through Stacking Approach. *Advances In Natural And Applied Sciences*, 11(9), 323-328.
25. Uma Maheswari, K., **Valarmathi, A.** (2018). A Novel Feature Selection Algorithm For Coronary Artery Disease Prediction. *Applied Mathematics And Information Sciences*, 12(4), 735-744.
26. Faleela Farzana, **Valarmathi, A.** (2014). A Survey Of Challenges And Cross-Layer Security In Industrial Wireless Sensor Networks. *International Conference On Advances In Design & Manufacturing*.
27. Kanimozhi, C., **Valarmathi, A.** (2017). Microarray Gene Expression Classification Using Support Vector Machine Ensembles. *International Journal Of Computational Intelligence Research*, 13(8), 1999-2004.
28. Kaviarsai, **Valarmathi, A.** (2017). Near The Beginning Of Non Small Cell Lung Cancer Avoidance In Human Way Of Life Risk Factors Classification Using Clustering Algorithm In The R Environment. Volume 8, No. 5, May-June 2017.
29. Sinduja, C., **Valarmathi, A.** (2015). Improving Energy Efficiency Using Energy Aware And Topology Healing Mechanism In Wireless Sensor Networks. *International Journal Of Applied Engineering Research*, 10(5), 4644-4647.

30. **Valarmathi, A.**, & Chandrasekaran, R.M. (2009). Effect Of Mobility And Traffic Flow On DSR Protocol In A Pre-Defined Mobile Ad Hoc Network. International Journal Of Computer Science And Network Security, 9(4), 10-15.
31. **Valarmathi, A.**, Chandrasekaran, R.M., & Gopalan, N.P. (2009). Reliability Of DSR Ad Hoc Routing Protocol In Different Mobility Environment. International Journal Of Emerging Technologies And Applications In Engineering, Technology And Sciences, 2(2), 550-554.
32. **Valarmathi, A.**, & Chandrasekaran, R.M. (2009). Behavioral Analysis Of Reactive MANET Routing Protocol For Streaming Multimedia Applications. International Conference On Computer And Network Technology, ICCNT, IEEE, 129-132.
33. **Valarmathi, A.**, & Chandrasekaran, R.M. (2010). Congestion Management Routing Protocol In Mobile Adhoc Networks. ICCCI '10, 22-23 July 2010, Madurai, India.
34. **Valarmathi, A.**, & Chandrasekaran, R.M. (2010). Enhancing Quality Of Service In Manets Through Multipath Routing. ICICT-2010, 16-17 December 2010, Madurai, India.
35. Malini, S., Kannan, E., & **Valarmathi, A.** (2012). Performance Optimization Of Single-Path And Multi-Path AODV Using Response Surface Method (RSM). Southeastcon, 2012 Proceedings Of IEEE, 1-4.
36. Anandraj, P., & **Valarmathi, A.** (2013). Discovery Of Resources In Wide Area Distributed Computational Grids By Hybrid Fuzzy Clustering. IEEE - International Conference On Research And Development Prospects On Engineering And Technology (ICRDPET 2013), 5, 87-91.
37. Jayachandran, K., & **Valarmathi, A.** (2013). Energy Efficient Multihop Based Data Collection Using Rendezvous-Based Approach In Wireless Sensor Network. ICACT-2013, JKKN College Of Engineering And Technology.

c. **National Journals:**

Patents:

Sponsored Research Projects:

S.No	Name of the project	Funding agency	Project value (Rs.)	Duration	Status
1	GIS Based Spatial Mining Of Soil Contamination Level In Cauvery	DST	Rs.7,64,500 (Principal Investigator)	2018-2020	Completed

	Delta Region				
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Consultancy Activities:

S.No	Name of the work	Role(PI/ Co PI)	Agency	Amount	Duration
1	Up gradation of LAN and Wi-Fi	Principal Consultant	Tamil Nadu National Law University	Rs.80 Lakhs	2016-2017

List of Seminar / Short Term Course /FDP/ Workshop Organized

S. No.	Role of the person	Programme Organized	Organized/Sponsored By	Duration
1	Institute Remote Centre program Coordinator, Anna University	Online winter FDP on AI & Deep Learning, IOT Applications with Sensors, Embedded systems & Data Analytics, Technology Enabled Teaching, Learning & process for institutes Biometric security in gen AI era March 1-12 2025	Ministry of Electronics & Information Technology, Govt of India in association with Indian Institute of Technology (IITDM, Jabalpur).	Feb1-23 2025 Feb17-28 2025 Feb 03-14 2025 March 1-12 2025
2.	Institute Remote Centre Coordinator, Anna University	Skill Development Programme on Internet of things and Applications (Empowering girls to reduce the gender gap)	Trans-eurasia information network and European union, in association with Indian Institute of Technology (IITDM, Jabalpur).	Feb 20 - 4 March 2023
2	Institute Remote Centre Coordinator Anna University	Skill Development Programme on Python programming (empowering girls to reduce the gender gap)	Trans-eurasia information network and European union, in association with Indian Institute of Technology (IITDM, Jabalpur).	Sep 15-17, 22-24, 2022
3	Institute Remote Centre Coordinator	More than 10 FDPs (2 weeks and one-week FDP) Programme		

	Anna University	FDP Programme on Robotics and Artificial Intelligence	Ministry of Electronics and Information Technology (MeitY), Govt. of India in association with Indian Institute of Technology (IIITDM, Jabalpur).	(June 24th – 28, 2019)
		FDP Programme on VLSI Chip Design		(July 8th - 12th, 2019)
		NKN Winter Faculty Development Programme DEEP LEARNING AND APPLICATIONS		09th - 13th, 2019
		Two weeks online certificate program on ICT tools for teaching, Learning tools		March 15-21, 2021
		2 weeks Winter FDP on “IoT & Applications (Smart Systems)”		(14 – 25 Feb 2022).
		Two weeks online FDP on “Data Science for All” (endorsed by AICTE, UGC and NBA)	E&ICT Academy, IIITDM Jabalpur in Association with University College of Engineering, BIT campus, Trichy	(27 Jul – 7 Aug 2020)
		Joint Two Weeks Online Certificate Programme Machine Learning for Computer Vision (ML4CV 2021)	Jointly organized by IIT, Guwahati, IIT Kanpur MNIT, Jaipur, NIT, Patna, and PDPM IIITDM Jabalpur	From February 1-12, 2021
4.	Course Director	Modernization In Bio-Informatics And Big Data	Sponsored by DBT	19.12.2016 To 26.12.2016
5.	Track Chair	1st International And 4th National Conference On Reliability And Safety Engineering (Incrs- 2018), Track On Big Data Analytics For Critical Systems	Jointly Organized By Pdpm-Indian Institute Of Information Technology, Design And Manufacturing Jabalpur, Society For Reliability And Safety (Sresa), Mumbai	February 26-28, 2018
6.	Convenor	International Workshop On Big Data Visualization And Graph Databases (Bdvgd - 2016)	Anna University	24th– 25th February 2016
7.	Convenor	National Level Symposium Tech“Gyan 14, Tech-Gyan16, Tech-Gyan 18.	Anna University, BIT Campus, Trichy.	(12.9.2014), (08.03.2018)
8.	Convenor	Two Days Workshop On “Awareness On Research & Employable Opportunities In Recent Technology,”	Anna University, BIT Campus, Trichy.	06th & 07th October 2017
9.	Convenor	Two Days Workshop On “Cisco Networking”	Certified By ACM, IIT-Delhi.,	12-13 Feb 2015

10.	Convenor	Two Days Workshop On “Big Data Analytics”	-	31 st & 1 st October 2015
11.	Convenor	Two Days Workshop On “Big Data Analytics Using Hadoop” (Wbdah-15)	-	26th – 27th March 2015
12.	Convenor	One Day Workshop On “Hands-On Training – Android Application Development,”	-	21st September 2015
13.	Convenor	Short Term Training Programme On “Innovations In Computer Assisted Language Learning”	Sponsored by TEQIP-II	
14.	Convenor	Two days international conference Advancements in computing and communication Technologies (ICACCT“15),	-	April 2015
15.	Organizing Committee Member	2nd Sresa National Conference On Reliability And Safety Engineering	CEG Campus, Anna University, Chennai-25.	October 8 - 10, 2015
16.	Co-Chair	Training Programme On Big Data Analytics	Sponsored by DST	14/7/2016 To 23/7/2016
17.	Co-Chair	NCRS 2014	DRDO, BARC-Mumbai Sponsored	13.2.2014 - 15.2.2014
18.	Coordinator	Workshop On “Android Application Development,”	-	6.9.2013 - 7.9.2013
19.	Coordinator	National Level Workshop On Web Services,	Sponsored by CSIR	3.1.2013 - 4.1.2013.
20.	Coordinator	One Day Workshop On “Web Design,”	SC/ST cell	7.9.2011
21.	Organizing Secretary	Two Days National Conference On Emerging Trends In Engineering, Management And Computer Applications	-	1.4.2011 - 2.4.2011.







List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)

S. No.	Seminar/Short Term Course/ FDP/ Workshop	Organized by	Duration
1.	IP Awareness Training Program, National Intellectual Property Awareness Mission	Govt of India.	2023
2.	Faculty Development Programme on "Blockchain and Smart Contract Technology	NIT Trichy sponsored by AICTE-MARGDHARSHAN Scheme.	2021
3.	MOOC Course on Cloud Computing	NPTEL	2021
4.	Pervasive Computing Technologies	Center for Convergence Technologies, Anna University of Technology, Trichy	2011
5.	Writing Effective Conference Paper	IIT Bombay, under the national mission of education through ICT (MHRD)	2012
6.	Big Data Analytics	Anna University Chennai	2014
7.	Research Focus on Big Data in Bioinformatics	Kongu Engineering College, Erode.	2015
8.	UGC Orientation (2012)	University of Madras	2012
9.	Emerging Trends in Wireless Communication	AICTE	2013
10.	MOOC Course on IoT	NPTEL ,IIT Kharagpur	2018
11.	MOOC Course on Wireless Adhoc and Sensor Networks	NPTEL	2018

Industrial Training Attended

S. No.	Industrial Training Program	Organized by	Duration
1	Cyber Security Measures and Tools	National Institute of Technical Teachers Training and Research and Digintrude InfoSec Pvt Ltd	2020
2	J2EE and Best practices in Application Development	ICT in Association with TCS and CTS.	2009
3	Training on Empowering teachers for enhancing SC/ST students Employability (Training for SC/ST pre-final year engineering students),	TAHDCO, ICT, and Transtaff	2010.
4	Training on "Foundation Skills In Integrated Product Development" supported by TEQIP II & TANSCSTE	CFD, Anna University Chennai in collaboration with IT-ITes Sector Skill Council NASSCOM.	2016

National / International Conferences organized / Participated:



-  K Saranya, A Valarmathi, [Securing Medical Data in Cloud-Based IoT Networks Using Deep Learning Techniques](#), 2024/12/12, 2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS), Pages 1208-1217, IEEE, 2024
-  R Geethanjali, A Valarmathi, [Deep Learning Approach to COVID-19 Misinformation on Social Media with Multimodal and Multilingual Deep COVID-Fake Sense Model](#), 2024/12/12, 2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS), Pages 570-580, , IEEE, 2024.
-  **Geethanjali, R., & Valarmathi, A. (2024).** “**Navigating** public opinion: An in-depth analysis of COVID-19 vaccination sentiments on Twitter through ML and DL models.” In Proceedings of the International Conference on Research Trends in AI and IoT for Infrastructure and Industry (AIII 2024) (pp. 229–235). Centre for Research , Anna University Chennai, India: ISBN: 978-93-91930-97-4.
-  K Saranya, A Valarmathi Medical image compression and classification using deep Learning algorithms in IOT healthcare , In Proceedings of the International Conference on Research Trends in AI and IoT for Infrastructure and Industry (AIII 2024), 421-426, 2024.
-  **Dr.A.Valarmathi, S.Nalini.** "Soil Contamination Level in Cauvery Delta Region Through Machine Learning and GIS Techniques." Indian Geotechnical Conference NIT, Trichy, December 2022, Part of the Lecture Notes in Civil Engineering book series (LNCE, volume 296).2023
-  R. Geethanjali and A. Valarmathi, "Multimodal Sentiment Analysis (MSA) : An Analysis of Concussion Medical Related Tweets in Sports“ *International Conference on Modern Trends in Sports Performance*

(*ICMTSP - 2023*), AU,Karaikudi, India, 2023, ISBN: 978-93-5813-249-6 pp. 1004-1015- **Published APR 2023**

-  Saranya, **Dr. A. Valarmathi**. "A Comparative Study on Machine Learning-based Cross Layer Security in Internet of Things (IoT)." Proceedings of the International Conference on Automation, Computing and Renewable Systems (ICACRS 2022), Proceedings of IEEE.,2022
-  Geethanjali, **Dr. A. Valarmathi**. "Issues and Future Challenges of Sentiment Analysis for Social Networks: A Survey." Proceedings of the International Conference on Automation, Computing and Renewable Systems (ICACRS 2022), Proceedings of IEEE.
-  Dr. K. Uma Maheswari, **Dr. A. Valarmathi**. "Heart Disease Prediction Using Hybrid Artificial Intelligence Technique with Cascaded Neural Network." TNSCST Sponsored 8th International Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'22), May 20-21, 2022, Organized by Karpagam Institute of Technology, Coimbatore.
-  S. Jayanthi, **Dr. A. Valarmathi**. "VKDS: A Vigorous Key Distribution Strategy for Sensitive Concealment in Personal Health Record." TNSCST Sponsored 8th International Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'22), May 20-21, 2022, Organized by Karpagam Institute of Technology, Coimbatore.
-  Mrs. Kavitha R, **Dr. A. Valarmathi**. "Enhanced Hybrid Optimal and Intelligent Technique for Data Storage in Cloud." TNSCST Sponsored 8th International Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'22), May 20-21, 2022, Organized by Karpagam Institute of Technology, Coimbatore.
-  **A. Valarmathi**, S. Nalini, M. Kalidhas. "Soil Contamination Level in Cauvery Delta Region through Machine Learning and GIS Techniques." Proceedings of Indian Geotechnical Conference 2021, December 16-18, 2021, NIT Tiruchirappalli.
-  R. Jayamala, **Dr. A. Valarmathi**. "An Investigation of Scheduling Algorithm and Their Metrics in Cloud Computing." International Conference on Computation of Power, Energy, Information, and Communication (ICCPEIC), 2017.
-  Faleela Farzana, **Dr. A. Valarmathi**. "Enhancement of WSN Security Using Cross Layer Design." 3rd International Conference on Computing, Communication, and Automation (ICCCA'17), April 7-8, 2017.
-  V. M. Priyadarshini, **Dr. A. Valarmathi**. "Breast and Nipple Line Localization for Adult Image Identification in Online Social Networks." ICETETS 2016, Kings College of Engineering, Thanjavur, India, February 24-26, 2016. (IEEE Xplore Indexed In Thomson Reuters' Web Of Science)

-  M. Monica Bhavani, **Dr. A. Valarmathi**, "Optimal Traffic Route Finder System" - Proceedings of the 1st International and 4th National Conference on Reliability and Safety Engineering (INCRS-2018), PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur, Jabalpur, February 26-28, 2018.
-  M. Monica Bhavani, **Dr. A. Valarmathi**, "Mapping of GPS Logs with Typical Transportation" - Online International Conference on Green Engineering and Technologies (IC-GET), 2016.
-  S. Nalini and **Dr. A. Valarmathi**, "Fuzzy Association Rule Based Cluster Head Selection in Wireless Sensor Network" - International Conference on Green High-Performance Computing, St. Xavier's Catholic College of Engineering, February 26-27, 2016.
-  Vaddi Naga Padma Prasuna, **A. Valarmathi**, and J. Arputha Vijaya Selvi, "Finite State Markovian Model for Trustworthy Reliable Communication in Dynamic Reconfigurable Wireless Sensor Network Architecture" - Emerging Trends in Engineering, Technology, and Science (ICETETS), 2016.
-  Faleela Farzana, **Dr. A. Valarmathi**, "Cross-Layer Secure Architecture to Avoid Collision in Wireless Sensor Networks" - International Conference on Future Trends in Engineering and Business (Future Trends 2017), 2017.
-  Kaviarasi, **Dr. A. Valarmathi**, "Recognition and Anticipation of Cancer and Noncancer Prophecy Using Data Mining Approach" - ICETETS 2016, Kings College of Engineering, February 24-26, 2016.
-  P. Meena, M. Monisha, S. Sujatha, **Dr. A. Valarmathi**, "A Cloud-Based Framework for Agriculturists on Mobile Platform" - International Conference on Advancements in Computing and Communication Technologies.
-  S. Swetha, K. Subakhan, S. Nalini, **Dr. A. Valarmathi**, "Easy SMS: A Protocol for End-to-End Secure Transmission of SMS" - International Conference on Advancements in Computing and Communication Technologies.
-  Vaddi Naga Padma Prasuna, **A. Valarmathi**, J. Arputha Vijaya Selvi, "Parametric Analysis of a Novel Reconfigurable Wireless Sensor Network Architecture" - Emerging Trends in Engineering, Technology, and Science (ICETETS), 2016.

Professional recognitions: (details like chairperson/member of a committee, reviewer, editor ...etc)

-  **Board Of Studies Member:** Department of MCA, National Institute of Technology, Tiruchirappalli.
-  **Record verification and Interview committee Member,** Browsing Center license in Trichy District, Commissioner of police, Trichirappalli (2015).

- 📌 **Doctoral Committee Member** of Anna University Chennai and National Institute of Technology (NIT-Trichy) from 2013 onwards.
- 📌 **Project Selection Committee Member** - Young scientist project, Anna University, BIT campus, Trichy.
- 📌 **Reviewer:** Elsevier, Inder science, INCRS-2018, ICETETS 2016 & IEEE conferences
- 📌 **Question Paper and Key setter** - CIT, Alagappa University, Bharathidasan University, Pondicherry University & Autonomous Institutions

(A) Chairperson for conferences / Seminar / Technical symposia:

- 📌 **Session Chair**, Two days national level symposium (FENIX18) 2018.
- 📌 **Session chair** for International conference on "Advancement in computing and communication technologies" organized by the Department of Computer application BIT Campus-Tiruchirappalli ,2015.
- 📌 **Chief Guest**, CODFEST , 2017, Shanmuganathan Engineering College, Pudukottai.
- 📌 **Judge** - Web designing for Tech-Gyan2k18 organized by the Department of Computer application BIT Campus-Tiruchirappalli 2018
- 📌 **Session chair** –NCCCT'16 Dept of CSE, BIT CAMPUS, TRICHY (Paper presentation event).
- 📌 **Session Chair**, International conference Anveshana 2019, Christ University, Bangalore University, CSI and IEEE, 2019.
- 📌 **Convener** Anna university sponsored international workshop on big data visualization and graph database, 2016.
- 📌 **Co-convenor**, Ist SRESA national conference on reliability and safety engineering, 2014.
- 📌 **Session chair**, 2nd SRESA national conference on reliability and safety engineering, NCRS 2015 Chennai, October 8-10, 2015.
- 📌 **Session chair**, TEQIP-II SPONSORED national conference NCRIT'16, August 2016
- 📌 **Session chair**, Prayuddha'18 March 8 and 9th, 2018

(B) Guest lectures delivered:

- 📌 **Resource person** - A national seminar on Recent Trends and Challenges in IoT" on 12/01/2023 at ICT Hall-1, NMC organized by PG department of Computer Science, NMC college (Autonomous), Trichy.
- 📌 **Resource person.** "AICTE sponsored FDP on Social Engineering, IOT, Web security Techniques, tools and prevention, Govt Polytechnique, Pondicherry. 2021
- 📌 **Keynote speaker** and delivered a lecture on "security in computing and IOT" in the National seminar, Department of computer applications, Jayaram college of engineering and technology on 21.03.2017.
- 📌 **Keynote Speaker**, National level workshop, Pabset, 23 Feb 2010.
- 📌 **Resource person** – Induction program UCE, BIT Campus, Anna University, Tiruchirappalli ,2022.
- 📌 **Resource person** - Two days "Hands-On Workshop on Machine Learning Using Python" UCE, BIT Campus, Anna University, Tiruchirappalli ,2020.
- 📌 **Delegate** (On behalf of Tamilnadu), Geo Smart India (Technical partner DST, 2019), Feb 12-13, New-Delhi.
- 📌 **Resource Person**, Two days national level workshop on Internet of Things (IOT), Dept of ECE, Sudarsan Engineering College, 2018, Pudukottai

- **Resource Person**, TEQIP II sponsored Short Term Training Programme On "Innovations in Computer Assisted Language Learning" organized by the Department of Computer application and Department of English, Anna University, BIT Campus-Tiruchirappalli ,2014
- **Resource Person** for Data Analytics for geosciences, Healthcare and society organized by the Department of Computer application BIT Campus-Tiruchirappalli on 2016.
- **Resource Person** for TEQIP II sponsored FDP on enhancing classroom communication by the Department of English, Anna University, BIT Campus-Tiruchirappalli on 2016.

DECLARATION:

I certify that the information furnished above is correct and true to the best of my knowledge and belief.



Signature of the staff member