

## **CURRICULUM VITAE**

**Name:** RAMALATHA MARIMUTHU

**Educational qualifications:** BE, MS, MS (By Research), PhD

**Teaching Experience :** 35 years in polytechnics and engineering colleges.

**Industry Experience :** Director, iExplore Foundation for Sustainable Development, from 2021

### **Details of Membership in Professional Bodies (National/International):**

1. Life Member , ISTE
2. Senior Member , IEEE, IEEE Computer Society, IEEE Communication Society, IEEE Women in Engineering, IEEE Education Society, IEEE Society on Social Implications of Technology
3. Fellow, IETE
4. Member, BES
5. Member, VLSI Society of India

### **Publication of Research papers:**

1. Ramalatha M, Sridharan D, VLSI Design of High Speed Karatsuba Multiplier for Coprocessor Applications Using Vedic Mathematics – International Journal of Systemics, Cybernetics and Informatics, April 2007.
2. S.Kumaravel, R Marimuthu, A VLSI Implementation of High Performance RSA Algorithm Using Vedic Mathematics –IEEE CS Press.
3. M Ramalatha, KD Dayalan, P Dharani, SD Priya, “High Speed Energy Efficient ALU Design using Vedic Computation Techniques” – IEEE CS Press, 2009
4. M Ramalatha, AP Karthick, S Karthick, K Muralikrishnan, “A High Speed 12-bit Pipelined ADC using Switched Capacitor and Fat Tree Encoder , IEEE CS Press
5. Ramalatha M, Ramkumar.A K, Selvaraj.S , Suriyakanth.S, “RFID based personal medical data card toll automation”, International journal of advanced research in computer science, June 2013.

6. V.Ram Prasad, Ramalatha Marimuthu, V.Deepak, S.Gowtham, "Remote Heart Rate Monitoring System", International journal of advanced research in computer science, June 2013.
7. Vh Arul, Ramalatha M, "A Study on Speech Recognition Technology", Journal of Computing Technologies, Volume 3, Issue 7 July 2014
8. Dinesh Chand, Ramalatha M "A Survey on ADPLL Components and their effects upon Power, Frequency and Resolution", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 11, Number 3 (2016) pp 1569-1574.
9. Ramalatha Marimuthu, Sathyavathi Ramkumar, Harshini Infanta, Alagu Meenal and Preethi, "Design of Robotic Hand-Glove for Assisting Mobility Impaired" Springer Smart Innovation, Systems and Technologies 51, DOI 10.1007/978-3-319-30927-9\_59, 2016
10. Ramalatha M, Suresh A, Alamelu M and Kanagaraj S, "Driver Fatigue Detection using Image processing and Accident Prevention", International Journal of Pure and Applied Mathematics, Volume 116, No 11, 2017, pg 91-99
11. Alamelu M, Ramalatha Marimuthu, "A Survey On Healthcare And Social Network Collaborative Service Utilization Using Internet Of Things", Journal of Advanced Research in Dynamical and Control Systems, Vol 9, Sp-14/2017, pg 1010-1030
12. R. Dinesh, Ramalatha Marimuthu, "A low power and fast locking ADPLL to enhance healthcare monitoring systems for elderly people" in ARPN Journal of Engineering and Applied Sciences, VOL. 13, NO. 6, MARCH 2018 (Scopus indexed)
13. Arul Valiyavalappil Haridas, Ramalatha Marimuthu & Basabi Chakraborty, "A Novel Approach to Improve the Speech Intelligibility Using Fractional Delta-amplitude Modulation Spectrogram", Cybernetics and Systems, An International Journal, Taylor and Francis online, <https://doi.org/10.1080/01969722.2018.1448241>, 25 Oct 2018
14. Arul V.H, Ramalatha Marimuthu and V.G.Sivakumar (2018), "A Critical Review and Analysis on techniques of Speech Recognition: The road ahead"

- International Journal of Knowledge-based and Intelligent Engineering Systems Vol 22 (2018) page no 39–57- DOI: 10.3233/KES-180374- SCOPUS Cite Score-3.4)
15. Ramalatha Marimuthu, Navaneethakrishnan R, Alagu Meenakshi, Uma Maheswari S, "Catch Them Young: Importance of Career Planning in Indian School Education Systems", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7 Issue-4S, November 2018
  16. Shivappriya, Ramalatha Marimuthu, Arun Kumar P, "Machine Monitoring Web Portal and Mobile App", International Journal of Innovative Technology and Exploring Engineering (IJITEE), December 2018
  17. R. Dinesh, Ramalatha Marimuthu, "A Ring Oscillator Based Random Generator for Cryptography Applications", 'International Journal of Innovative Technology and Exploring Engineering', Volume-8 Issue-11, September 2019.
  18. Swaminathan J.N., Kavitha A., Navaneethakrishnan R., Umamaheswari S., Marimuthu R. (2020) A Novel Linear Collaborative Discriminant Regression Classification and L1 Norm Based Algorithm for On-Chip Realization of Uncontrolled Face Recognition. In: Pandian A., Ntalianis K., Palanisamy R. (eds) Intelligent Computing, Information and Control Systems. ICICCS 2019. Advances in Intelligent Systems and Computing, vol 1039. Springer Nature
  19. R. Dinesh, Ramalatha Marimuthu, "An analysis of ADPLL applications in various fields" in Indonesian journal of Electrical engineering and computer science (Scopus indexed) , Vol 18 . No 2, May 2020
  20. Dinesh.R and Ramalatha Marimuthu(2020), "A wide range high resolution digital controlled oscillator with high precision time to digital convertor for optimal sampling digital PLL", Elsevier Microprocessor and micro systems, vol. (74).
  21. Arul V.H, Ramalatha Marimuthu V.G. Sivakumar and Basabi Chakraborty (2020), "Emotion Recognition of speech signal using Taylor series and Deep Belief Network-based classification" Evolutionary Intelligence-Jan 2020 - Special Issue 1-4-(SCOPUS Cite Score-2.7)
  22. Arul V.H, Ramalatha Marimuthu, V.G. Sivakumar and Basabi Chakraborty (2021), "Taylor-DBN: A New Framework for Speech Recognition System"

International Journal of Wavelets Multiresolution and Information Processing, Vol 19, No 2, 2021 <https://doi.org/10.1142/S021969132050071X> WoS. (Impact Factor-1.4)

23. Ramalatha Marimuthu, Kesav Krishna G., Sathyanarayanan, Shivappriya S.N., Valarmathi R, “Ease Impact of age on stress related complications in pregnancy”, International Journal of Applied Science and Engineering, Vol.18, No.2, June 2021 [https://doi.org/10.6703/IJASE.202106-18\(2\).013](https://doi.org/10.6703/IJASE.202106-18(2).013)
24. Ramalatha Marimuthu, Larry Stapleton, Bozenna Pasik Duncan, Shally Gupta, Dominique Duncan, “Challenging the Digital Divide: Factors Affecting the Availability, Adoption and Acceptance of Future Technology in Elderly User Communities”, IEEE Computer Special Issue on Technology Predictions, June 2022.
25. B. Pasik-Duncan, G. Yin, L. Stettner, R. Marimuthu, H. Subhadra and C. Da Via, "Control Systems Society Technical Committee on Stochastic Systems and Control [Technical Activities]," in *IEEE Control Systems Magazine*, vol. 44, no. 4, pp. 15-78, Aug. 2024, doi: 10.1109/MCS.2024.3402577.

#### **Book Chapters Contributed:**

1. Dr.Ramalatha Marimuthu , Dr.M.Alamelu, Mr.S.Kanagaraj “Uncured disease rectification of human beings using Net Collaborating Systems”, published in Body Area Network Challenges and Solutions, Springer Publications March 2018
2. Dr.Ramalatha Marimuthu, Dr.Shivappriya, Dr.K.Malarvizhi, “Machine learning based cognitive support system for healthcare” published in Body Area Network Challenges and Solutions, Springer Publications March 2018
3. Ramalatha Marimuthu, S N Shivappriya, M N Saroja, “A Comparative Study On The Generation And Management Of Data For Healthcare And Health Diagnostics”, accepted for publication in the book Theory and Practice of Business Intelligence in Healthcare, published by IGI Global eEditorial Discovery.
4. Ramalatha Marimuthu, M.Shanthi, Supavadee Aramvith, “Smart Waste Management Model For Effective Disposal Of Waste Management Through

Technology”, Springer Book on Challenges and Solutions for Sustainable Smart City Development, 2021

5. Ramalatha Marimuthu, Bindu A.Thomas, Namratha DCruz, Aawatif Hayar, “Choice Based Recreation Facility For Smart Cities”, Springer Book on IoT and WSN based Smart Cities: A Machine Learning Perspective.

**Papers Presented in Conferences at National / International level:**

1. Ramalatha M, Data Storage Devices - National Conference on Micro Electronics - organised by AMACE, Vadamavandal.(1999)
2. Ramalatha M, Bit Sliced Microprocessors -National Conference on Micro Electronics - organised by AMACE.(1999)
3. Ramalatha M, Virtual Private Networks using WLAN - International Conference on Advanced Telecommunications - organised by VIT, Vellore.(2000)
4. Ramalatha M, Sridharan D, “Practical Issues concerning reconfigurability in processor architectures”, International Conference organized by Velammal Engineering College, 2006.
5. Ramalatha M, Sridharan D “Scalable Multipliers for Reconfigurable Architectures”, IEEE International Conference organized by BVB College of Engineering, Hubli, Karnataka, 2006
6. M Ramalatha, S Kumaravel, D Sridharan, "Low power Multipliers using Vedic Mathematics", International Conference organized by NEC, Kovilpatti. 2007.
7. M Ramalatha, S Kumaravel, D Sridharan, VS Kumar, “A Novel Area and Time Efficient Squarer Using Vedic Mathematics for Coprocessor Applications”, International Conference on Machine Learning, Models, Technologies and Applications, WorldComp’07, Las Vegas, USA, June 2007
8. Deenadayalan K, Ramalatha Marimuthu, “Binaural Sound Representation of Spatial Information for Visually Impaired”, North-East Asia Symposium on Nano, IT & Reliability (NASNIT) Vol. 14 No. 1, Taiwan, May 2009.
9. M Ramalatha, KD Dayalan, P Dharani, SD Priya,” High speed energy efficient ALU design using Vedic multiplication techniques. Advances in Computational Tools for Engineering Applications, 2009. ACTEA'09

10. M Ramalatha , K Thanushkodi, D Dayalan, P Dharani, “A Novel Time and Energy Efficient Cubing Circuit using Vedic Mathematics for Finite Field Arithmetic”, International Conference on Advances in Recent Technologies in Communication and Computing 2009, Kerala, 2009
11. Beulah David, Ramalatha Marimuthu, Dorai Rangasamy, Image Change Detection for Differently Exposed Image Pairs – International Conference on Advance in Electrical & Electronics, Information, Communication & Bio-Informatics, “AEEICB-2012” – 24 & 25 January 2012, Chennai 2012.
12. L.Deepika, P.Gayathri, S.Sivaranjani, Ramalatha M, LSI IR Tree Index for Geographic Document Search – International Conference on intelligent Information Systems and Management, IISM '12 – 13<sup>th</sup> and 14<sup>th</sup> July 2012, Coimbatore 2012.
13. Ramalatha M, Ramkumar.A K, Selvaraj.S , Suriyakanth.S, “RFID Based Personal Medical Data Card for Toll Automation”, International Conference on Architecture, Software systems and Green computing May 8-9, 2014
14. S Vengateswaran, V Ramani, M Ramalatha, “Intelligent assistive device to monitor the ankle-foot orthosis, ESA'14”, The 2014 International Conference on Embedded Systems and Applications, Las Vegas July 21-24, 2014.
15. HR Barathi, RD Priyadarshini, K Sowmya, M Ramalatha, “A cognitive approach for stroke rehabilitation by acute hand monitoring”, ESA'14 - The 2014 International Conference on Embedded Systems and Applications, Las Vegas, July 21-24, 2014
16. R Marimuthu, S Ramkumar, H Infanta, A Meenal, “Design of robotic hand-glove for assisting mobility impaired”, Smart Innovation, Systems and Technologies, Vol. 51, Proceedings of First International Conference on Information and Communication Technology for Intelligent Systems: Volume 2, 978-3-319-30926-2, 393439\_1\_En, (59) 2016.
17. Ramalatha Marimuthu, Sathyavathi S, “Impact of Service learning and Social Immersion on education and career building of young Indian Engineering Graduates – A case study”, IEEE International Women in Engineering Conference on Electrical, Electronics and Computer Engineering, Pune December 2016.

18. Alamelu M, Ramalatha Marimuthu, "A Survey On Healthcare And Social Network Collaborative Service Utilization Using Internet Of Things", International Conference on Innovations in Electrical, Information and Communication Engineering (ICIEICE'17)
19. Ramalatha M, Suresh A, Alamelu M and Kanagaraj S, "Design of a Persuasive Technology Model for Smart Agriculture", IEEE Region 10 Humanitarian Technology Conference, Dhaka, Bangladesh, December 2017.
20. Ramalatha M, Abilash Praveen, "Brown to Green Energy: Challenges in Sustainable Development", IEEE International Conference on Renewable Energy, Power Systems and Green Inclusive Economies, Casablanca, Morocco, April 2018
21. Akash A.R., Ramalatha Marimuthu, Navaneethakrishnan R, Kanagaraj S., "Cultural Factors impacting Energy Transition - A review", IEEE International Conference on Renewable Energy, Power Systems and Green Inclusive Economies, Casablanca, Morocco, April 2018
22. Navaneethakrishnan R, Santhanalakshmi M, Ramalatha Marimuthu, Kumaresan A, Alagumeenaakshi M "ADAS Headlamp for improved visibility "2018 International Conference on Inventive Computing Systems and Applications April 13-14, 2018, Pattaya, Thailand
23. Dr. Alagumeenaakshi Muthiah, Malaravan Alagesan, Dr. Ramalatha Marimuthu, Dr. Shivappriya, Navaneethakrishnan R, "A Review on Routing Protocols in WSN for Low power Applications" 2018 International Conference on Inventive Computing Systems and Applications April 13-14, 2018, Pattaya, Thailand.
24. Navaneethakrishnan R, Ramalatha Marimuthu, David S and Ajay V P, " Use of Microprocessor, Microcontroller & SoC development platforms in Automobile engineering courses – A survey" International Conference on Science, Technology, Engineering and Mathematics, KCT, Coimbatore, 2018
25. Dr. Ramalatha Marimuthu, G.Kesav Krishna, R.Sathyanarayanan, "Are pregnancy welfare schemes effective? A case study on India", IEEE International Conference on Intelligent Computing and Communication for Smart World, December 14-15, 2018, Kongu Engineering College, Perundurai, India.

26. Dinesh,R and Ramalatha Marimuthu (2018),“A low power and fast locking ADPLL to enhance healthcare monitoring systems for elderly people”, in ARPN Journal of Engineering and Applied Sciences, Vol. 13, No. 6.
27. Dinesh Ramachandran and Dr.Ramalatha Marimuthu, "A Survey about WSN and IoT Based Health Care Applications and ADPLL Contribution for Health Care Systems", accepted for oral presentation in IEEE iCAST2019 to be held in Morioka, Iwate during 23rd to 25th October, 2019.
28. Madhusri V, Kesav Krishnan G, Ramalatha Marimuthu and Sathyanarayanan Ramesh , "Performance Comparison Of Machine Learning Algorithms To Predict Labor Complications And Birth Defects Based On Stress", accepted for oral presentation in IEEE iCAST2019 to be held in Morioka, Iwate during 23rd to 25th October, 2019.
29. Shanthi M, Ramalatha Marimuthu, Shivappriya S.N. and Navaneethakrishnan R, "Diagnosis of Diabetes using an Extreme Learning Machine Algorithm based Model" accepted for oral presentation in IEEE iCAST2019 to be held in Morioka, Iwate during 23rd to 25th October, 2019.
30. Arul V.H, Ramalatha Marimuthu and Basabi Chakraborty (2020), “Emotion recognition system for specially needed people with optimized deep learning algorithm” IEEE 4th International Conference on Inventive Systems and Control,2020, Coimbatore, 164 ISBN - 978-1-7281-2812-2, page no 114-121. DOI: 10.1109/ ICISC 47916.2020.9171190-SCOPUS.
31. Arul V.H, Ramalatha Marimuthu and Basabi Chakraborty (2020), “Adaptive Fractional Delta-Amplitude Modulation Spectrogram:- An Improvised Method to Improve the Speech Intelligibility” IEEE 4th International Conference On Intelligent Computing in Data Sciences, Morocco2020, ISBN-978-1-7281- 8084-7, DOI:10.1109/ICDS50568.2020.9268717-SCOPUS
32. K. Maheswari1, Ramalatha Marimuthu, and S.N. Shivapriya, “State estimation for discrete time-delayed non-fragile switched neural network with parameter uncertainties and sojourn probabilities”, AIP Conference Proceedings 2270, 140008 (2020); <https://doi.org/10.1063/5.0019689>



33. Inderpreet Kaur, Manpreet Singh Manna, Ramalatha Marimuthu, “Implementing Hybrid Amplifiers for DWDM System using Artificial Intelligence Methods”, presented in IEEE International Conference on Service Operations and Logistics, and Informatics”, Malaysia 2021
34. Ramalatha Marimuthu, Bozena Pasik-Duncan, Harivardhagini Subhadra, Mary Doyle-Kent, "Enabling Indian Women Career Reentry in Technology – a Learning Journey", presented in 22nd IFAC Conference on Technology, Culture and International Stability, Waterford, Ireland, May 2024
35. Bozena Pasik-Duncan, Ramalatha Marimuthu, Harivardhagini Subhadra, “Universal Access to Technology – Central Role of Internet in Education and Reflections and Perspectives”, presented in the IFAC International Workshop on Internet Based Control Education held in Belgium in September 2024.
36. Ramalatha Marimuthu, Bozena Pasik-Duncan, Harivardhagini Subhadra , Special Session on “Technology Education Mentorship: Empowering Educators and Learners in the Digital Age” accepted for 11<sup>th</sup> International Conference on Control, Decision and Information Technologies, July 15 -18, 2025, Split, Croatia.
37. Ramalatha Marimuthu, Harivardhagini Subhadra, Bozena Pasik-Duncan, “Mentoring the Mentors : Importance, Methodology and Implementation”, accepted for 11<sup>th</sup> International Conference on Control, Decision and Information Technologies, July 15 -18, 2025, Split, Croatia.
38. Umawathy Techanamurthy , Ramalatha Marimuthu, Bozena Pasik-Duncan, “Engineering Students’ Opinion on the Use of a Digital Escape Room As a Learning Strategy for Learning Integration and Differentiation”, accepted for 11<sup>th</sup> International Conference on Control, Decision and Information Technologies, July 15 -18, 2025, Split, Croatia.

#### **Patents Granted :**

**Patent No :** 420636 for an invention entitled IMPROVED ANKLE FOOT ORTHOSIS  
**Period:** 20 years from the 19th day of January 2018

#### **Participation in Conferences :**

1. Conference on Latest Developments in DSL-BES, Chennai & IETE, Chennai -2004
2. International conference on POWER AWARE VLSI DESIGN-VLSI Society of India, in Kolkata 2005
3. International Conference “INDICON 2005” conducted by IEEE India Council, at IIT, Madras.
4. IEEE International Conference on Communication, Signal and Image Processing organized by BVB College of Engineering, Hubli, Karnataka, 2006.
5. International Conference on Advances in Electronics and Communication organized by NEC, Kovilpatti. 2007.
6. IEEE Region 10 International Conference “Tencon 2009” organized by IEEE Singapore Section and IEEE Region 10 at Suntec International Convention Centre, Singapore.
7. IEEE Region 10 International Conference “Tencon 2010” organized by IEEE Japan Council at Fukuoka, Japan in 2010.
8. IEEE Women in Science and Engineering Conference “WISE 2011” organized by Curtin University, Perth, Australia in March 2011.
9. IEEE Photovoltaic Conference “PVSC 2011” organized by IEEE Photovoltaic Society at Seattle, Washington in June 2011.
10. IEEE PES conference PES 2012 organised by IEEE PES Society, May 8<sup>th</sup> to 10<sup>th</sup> 2012, Orlando, Florida.
11. International Conference on Human Computer Interaction organized by IIT, Kharagpur, December 2012
12. IEEE Women in Engineering- Google Conference organized by Google, Mountainview, California, January 2013
13. IEEE Student, Women in Engineering, Young Professional Congress, Colombo, Sri Lanka July 2015
14. IEEE Women in Engineering International Leadership Conference, San Francisco, May 2014, 2016
15. IEEE WIE conference in Electronics and Computer Engineering, Pune, 21,22 December 2016,
16. International Conference on Science, Technology, Engineering and I STEP, Kumaraguru College of Technology, July 2017
17. IEEE Region 10 Humanitarian Technology Conference, Dhaka, Bangladesh, December 2017.

18. IEEE International Conference on Renewable Energy, Power Systems and Green Inclusive Economies, Casablanca, Morocco, April 2018
19. Women in Power Forum, World Bank Headquarters, Washington DC, September 2018.
20. IEEE International Women Leadership Summit, Shibaura Institute of Technology, Tokyo, Japan, November 2018
21. IEEE International Conference on Awareness Science and Technology, October 23 - 25, 2019, Morioka, Japan.
22. IEEE SPS Seasonal School on Recent Advances in Artificial Intelligence for Signal Processing on December 28 – 31, 2021, Hyderabad, India
23. IEEE International Women Leadership Summit, Hyderabad Section, Marigold Hotels, 26-27 August 2022.
24. 22nd IFAC Conference on Technology, Culture and International Stability, Waterford, Ireland, May 2024

**Lectures Delivered:**

1. Lecture on “Humanitarian Technology” in IEEE Sections Congress (organized once in three years) held in Quebec, Canada on September 19<sup>th</sup> to 22<sup>nd</sup> 2008.
2. Lecture on “Women in Engineering and Technology” in the First R10 Distinguished Seminar organized by Asia Pacific IEEE Technical Activity Committee and Vietnam Section at Hanoi University of Technology, Vietnam on 27.02.09.
3. Lecture on “Humanitarian Technology in Health and Education” at Indian Institute of Science, Bangalore on 24<sup>th</sup> May 2009.
4. Invited Tutorial Speaker on “Vedic Mathematics – From Arithmetic to Astronomy” at IEEE Region 10 International Conference “Tencon 2009” organized by IEEE Singapore Section and IEEE Region 10 at Suntec International Convention Centre, Singapore on 23<sup>rd</sup> November 2009.
5. Invited Lecture on “Troubleshooting the Short circuit between Eye and Brain” at Tufts University, Boston on 5<sup>th</sup> April 2010.
6. Invited Lecture on “Reconfigurable processors using Vedic Mathematics” at Kyushu University, Japan on November 22, 2010.

7. Invited Lecture on “Humanitarian Projects in Engineering” at the 3<sup>rd</sup> International Conference on Early Intervention organized by Madhuran Narayanan Centre for Exceptional Children on November 27<sup>th</sup> 2010, Chennai.
8. Invited Lecture on “Bridging the Skill Gap – Employability of Engineering Products and Expectations of Employers” at WISE 2011 conference March 2011.
9. Invited as a speaker in IEEE Photovoltaic Conference organized in Seattle, Washington on June 21<sup>st</sup>, 2011.
10. Invited Lecture on “Troubleshooting My Way Through Disabilities – Engineering For Change” in Pacific Northwest National Laboratory, Richland, Washington June 22<sup>nd</sup>, 2011
11. Invited Lecture on “My Journey as an Indian Woman Engineer – Fate or Fight?” in Region 10 IEEE WIE Congress, Auckland University, July 2011.
12. Invited Lecture on “Bridging the Skill Gap – Employability of Engineering Products and Expectations of Employers” –in Arizona State University on February 11<sup>th</sup>, 2012.
13. Invited Lecture on “Frugal Engineering for Assistive Technologies” in University of Central Florida, Orlando, May 2012.
14. Invited Lecture on “Humanitarian Technology” in IEEE Region 8 Student Congress, Madrid, Spain, July 2012.
15. Invited Lecture on “Humanitarian Technology” in the Grace Hopper Celebration of Women in Computing International conference, Baltimore, Maryland, USA, October 2012.
16. Invited Lecture on “Assistive Technology Projects for Research” in International Conference on Human Computer Interaction, IIT, Kharagpur, December 2012
17. Invited as a panelist in Early Career Track in the Grace Hopper Celebration India International conference organized in December 2012 in Bangalore, India
18. Invited talk on “Real World Projects” in the Google WIE conference organised at Google, Mountainview, California, January 2013.
19. Invited talk on “Technology for out of sync society” at the Google Special Needs Support Group, Google, Mountainview, California, January 2013

20. Invited talk on "Assistive Technology Projects and their impact on Engineering Students", IEEE Region 10 Technical Seminar, Tribhuvan University, Nepal, January 2015
21. Invited Talk on "Giving Back, Gaining Front and Making an impact" in IEEE WIE International Summit, Pune, September 2016
22. Invited as a panelist on "Women in STEM: An International Perspective" at the IEEE WIE Leadership Conference, San Francisco, California on 21 - 24th May, 2016
23. Invited as a speaker on Social Issues related to Women Career Development and Empowerment in IEEE WIE International Summits in Dubai, 2016, Bengaluru, 2016, Pune 2016, Goa 2017 and Sri Lanka 2017
24. Invited Lecture on "Impact of Assistive Technology and service learning in Engineering Education" at Kansas State University, Kansas, USA 2017
25. Invited Keynote on "Brown Energy to Green Energy: Challenges and Solutions", IEEE International Conference on Renewable Energy, Power Systems and Green Inclusive Economies, Casablanca, Morocco, April 2018
26. Invited Panelist in Women in Power Forum, World Bank Headquarters, Washington DC, September 2018.
27. Invited Lecture on "Rediscovering your talent: Power of mentoring", IEEE International Women Leadership Summit, Shibaura Institute of Technology, Tokyo, Japan, November 2018
28. Invited Lecture on "Assistive Technology for Sustainable Development" in Iwate Prefectural University, Japan, 21<sup>st</sup> October 2019
29. Invited Lecture on "The Good, The Bad and The Ugly of Doing research" in University of Southern California, 16<sup>th</sup> December 2020.
30. Invited Lecture on "Rediscovering your talent: Power of mentoring", IEEE International Women Leadership Summit, Hyderabad 2022
31. Invited Lecture on "Climate Injustice and Mitigation", IEEE International Women Leadership Summit, Raipur 2023

32. Invited as Special International Guest Speaker for the students of Kansas University (online) on “Research project ideas, Approaches, Writing reports” on 19<sup>th</sup> September 2023.
33. Invited speaker on “Through the Shark's Eye : Strategies for Crisis Management” conducted as part of Shark Tank 2023 on 16th November 2023.
34. Invited speaker for Student Young Professionals Women in Engineering Congress, Tokyo from August 29<sup>th</sup> to September 1<sup>st</sup>, 2024 organised in National Olympics Memorial Youth Center, Tokyo
35. Invited lecture on “Writing a readable, winning research paper” Department of Mathematics, The University of Kansas, on January 23<sup>rd</sup> 2025

#### **Publication of Books:**

- 1.Digital Technology
- 2.Digital Electronics & Computer Architecture
- 3.Digital Computer Fundamentals
- 4.Electronic Circuits I
- 5.Electronic Circuits II
- 6.Mechatronics

#### **Awards and Recognitions Received:**

1. Have received the **Outstanding Branch Counselor Award** for the year 2008.
2. Have received the **Mentor Award** from Government of Tamilnadu, Secretariate for the Disabled for contribution in developing the screener software for the early detection of Autism in Children.
3. Have received the **IEEE MGA Achievement award** for the year 2008, “For dedicated mentoring of IEEE students and encouraging them to focus their efforts towards contributions to benefit humanity.”
4. Have received **Life Time Achievement Award** for the year 2009 from Lions Club International.
5. Have received “**Community Excellence Award**” from Saliyar Mahajan Sangh in 2010.

6. Have received **Anita Borg Change Agent Award 2012** from Anita Borg Institute of Technology for Women in 2012.
7. Received “**MGA Leadership Award 2012**” from IEEE
8. Received the “**Systers Spring Pass it on Award 2014**” proffered by Anita Borg Institute of Technology, California for Women in 2014.
9. Received the “**Inspiring Member of the Year Award**” proffered by IEEE Women in Engineering, USA in 2016
10. Received the **IEEE Computer Society Golden Core Member 2020**
11. Received the **2021 IEEE MGA Larry K Wilson Transnational Award** for the conceptualization of IEEE YESIST12
12. Received the **2023 Youth Curator Excellence Award** from Rotary Club West of Coimbatore for my service towards nurturing the service learning in youth.
13. Received the **2024 EAB Meritorious Achievement Award in Continuing Education** for reskilling Returning Mothers and supporting career reentry.

**IEEE Activities :**

***IEEE Student branch/Section/ Chapters***

Chair, IEEE SSIT Madras Chapter 2024, 2025

Vice Chair, IEEE SSIT Madras Chapter 2018 -2020

Chair, IEEE Madras Section Gaja Cyclone Relief Interim Committee 2018

Chair, IEEE Madras Education Society Chapter, 2014-2018

Vice Chair, IEEE Madras Education Society Chapter 2012 – 2013

Treasurer, IEEE Madras Section 2008 – 2009

Chair, IEEE Madras WIE 2007- 2013

Executive committee member , IEEE Madras section 2006-2012

Chair, IEEE SIGHT SEA 2017 – 2020

Branch Counsellor, KVCET IEEE Student Branch 2009 -2010

Branch Counsellor, Easwari Engineering College IEEE Student Branch 2001 -2009

***IEEE Member and Geographic Activities Board & IEEE Educational Activities Board***

Past Chair, IEEE MGA Member Recruitment and Recovery Committee 2025  
Chair, IEEE MGA Member Recruitment and Recovery Committee 2023,2024  
EAB representative to IEEE Conferences Committee 2020,2021  
Chair, HKN Awards Committee 2019  
EAB representative to MELCC 2014  
Member, IEEE EAB EPICS committee 2014  
Chair, IEEE EAB EPICS Adhoc Committee 2014  
Member, EAB University Resources Committee 2014  
MGA Representative EAB 2014  
Member, Preuniversity Education Coordinating Committee 2013 -2017  
Member, IEEE MGA MELCC 2012

***Region and Committees:***

WIE Representative, IEEE Computer Society 2025  
Chair, IEEE WIE Returnship Committee 2025  
Member, IEEE Future of Education Adhoc Committee 2024  
Member, IEEE Marie Sklodowska Curie Award Committee 2022, 2023  
Chair, WIE Adhoc Committee on Governance 2020 – 2022  
Member, IEEE WIE 25th Anniversary Committee 2021 – 2022  
Member, IEEE WIE WePOWER Committee 2019 – 2022  
General Chair, Region 10 Student YP Women in Engineering Congress 2015  
Vice Chair, Region 10 Technical Activities 2015  
Chair, Women in Engineering Committee 2011 & 2012  
Member, IEEE WIE committee 2009 and 2010  
Region 10 Women in Engineering Coordinator 2008 -2010  
Region 10 Humanitarian Technology Challenge Core Group member      2009 -2010  
Region 10 Representative to WIE Committee 2008 – 2010



***Technical Activities Board & Societies:***

Vice President (Memberships), IEEE Society on Social Implications of Technology  
2025-2026

Member, IEEE Computer Society DEI Committee 2025

Member, IEEE SSIT Universal Access to Technology Committee 2021- 2025

Member, IEEE SSIT WIE Committee, 2021 - 2025

Ombudsman, IEEE Computer Society 2022, 2023, 2024

Member, IEEE SSIT Universal Access to Technology Committee 2021-2024

Member, IEEE TAB Climate Change Program 2022, 2023, 2024

Member, IEEE Computer Society Constitution and Bylaws Committee 2022, 2023

Secretary, IEEE Computer Society 2021

Board of Governors, IEEE Computer Society 2019-2021

Member, IEEE SSIT Women in Engineering 2019 -2021

CS representative to IEEE WIE 2019, 2020

Board of Governors, IEEE SSIT, 2017-2019

Chair, Chapters, IEEE SSIT 2015-2019

***IEEE Awards Board:***

Chair, IEEE Marie Sklodowska-Curie Award Committee 2024, 2025

Member, IEEE Theodore W. Hissey Outstanding Young Professional Award 2025

Member, IEEE Marie Sklodowska-Curie Award Committee 2021- 2023

Chair, IEEE Conferences Diversity and Inclusion Committee 2021

Member, IEEE Mildred Dresselhaus Medal Committee 2020- 2021

Member, Publicity and Promotions Committee of IEEE Awards Board 2020, 2021

***IEEE Conferences:***

General Chair, Returning Mothers Conference, 2019 -2025

Steering Committee Chair, International Conference on recent trends in  
Microelectronics, Automation, Computing and Communications Systems 2022

Advisory Committee, WIE Leadership Summit 2022

General Chair, WIE Leadership Summit, Coimbatore 2020

General Chair, WIE Leadership Summit, Pune 2016  
General Chair, WIE Leadership Summit, Chennai 2015  
Session Chair, WIE – International Leadership Conference, California, 2014  
General Chair, International Conference on Intelligent Interactive Systems and Assistive Technologies 2013  
General Chair, IEEE Women’s Congress 2009, 2012  
General Chair, Region 10 Women in Engineering Congress 2008

***Other Volunteering Activities:***

India Representative, World Bank’s WePOWER Committee 2018 – 2025  
WePOWER Returning Mothers Module Committee 2023, 2024  
WePOWER Internship Module Committee – 2021 -2024  
WePOWER STEMCOM initiative – 2021  
General Chair, IEEE YESIST12 – 2016-2025  
Advisory Committee, Grace Hopper Celebration India 2012 – 2016  
Chair, Student Scholarship Committee, Grace Hopper Celebration India 2013 – 2016  
Member of Thought Leader Committee, Discover Engineering 2014 -2018  
Member, Clinton Global Initiative 2013 -2014

**Interviews and News Items:**

1. Published in Computer Society’s Oral History Interview series 2021  
[https://ethw.org/Oral-History:World\\_of\\_Computing](https://ethw.org/Oral-History:World_of_Computing)
2. [http://www.theinstitute.ieee.org/portal/site/tionline/menuitem.130a3558587d56e8fb2275875bac26c8/index.jsp?&pName=institute\\_level1\\_article&TheCat=2201&article=tionline/legacy/inst2010/mar10/featureWIE.xml&](http://www.theinstitute.ieee.org/portal/site/tionline/menuitem.130a3558587d56e8fb2275875bac26c8/index.jsp?&pName=institute_level1_article&TheCat=2201&article=tionline/legacy/inst2010/mar10/featureWIE.xml&) Interview by “The Institute”
3. [http://ieeexplore.ieee.org/xpl/tocresult.jsp?asf\\_arn=null&asf\\_iid=4534676&asf\\_pun=null&asf\\_in=null&asf\\_rpp=null&asf\\_iv=null&asf\\_sp=null&asf\\_pn=2](http://ieeexplore.ieee.org/xpl/tocresult.jsp?asf_arn=null&asf_iid=4534676&asf_pun=null&asf_in=null&asf_rpp=null&asf_iv=null&asf_sp=null&asf_pn=2) Interview by Women in Engineering Magazine Summer 2008
4. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5753154> Interview by Women in Engineering Magazine Summer 2011
5. <https://ieeexplore.ieee.org/document/9600663> Featured in Women in Engineering Magazine - Article in IEEE Xplore November 2021

6. [https://ethw.org/Oral-History:Ramalatha\\_Marimuthu](https://ethw.org/Oral-History:Ramalatha_Marimuthu), an oral history conducted in 2021 by Bozena Pasik Duncan, IEEE Computer Society
7. “International Returning Mother’s Day: Dr. Ramalatha Marimuthu’s Initiative for Holistic Workplace Inclusivity Becomes a Global Movement” <https://ieeexplore.ieee.org/document/10975110?source=authoralert>, WIE Magazine, May 2025