Name: Dr S.Sumathi	
Designation:	Associate Professor
Qualification:	B.Tech, ME ,P.hD
Area of specialization:	Image Processing, Biometrics, Signal Processing, Embedded System

Experience :	**Industrial Experience**	**Teaching Experience**
	--	27 Years

Number of workshop / FDP attended:	**Number of Workshops**	**Number of FDPs**
	40	20

Publications:	**Conference**		**Journal**	
	National	**International**	**National**	**International**
	20	40	4	15

Patents:	**National**	**International**
	12	-

Professional Body Membership:	• Life Member, Indian Society for Technical Education (**ISTE**), India.
	• Life Member, Broadcast Engineering Society (**BES**), India
	• Life Member, Institution of Electronics & Telecommunication Engineers (**IETE**), New Delhi, India.
	    • Member in IEEE Engineering in Medicine and Biology Society.
	    • Member in IEEE Computer Society
	    • Member in IEEE Electron Devices Society
	    • Member in IEEE Power Electronics Society
	    • Member in IEEE Photonics Society

Staff Achievements:	Best teacher award Best ISF Co-Ordinator Award **Dr. A.P.J ABDUL KALAMAWARD FOR INNOVATIVE RESEARCH** **"Women Researcher Award"** "Woman Academic Mentor of the year 2022 Award"

Staff Achievements:

- Received **Best teacher award** from Lions Club of Madras Metropolitan South, on the occasion of Teacher's day celebration 2006 and 2010.
- Received the **Best ISF Co-Ordinator Award** consecutively for last 3 years 2018-19, 2019-20,2020-21 for organizing technical events andpromoting the IETE activities in her college. This award is givenby IETE, Chennai Centre.
- Received SEEE (Society for Engineering Education Enrichment) Awards 2020 under the category " **Dr. A.P.J ABDUL KALAMAWARD FOR INNOVATIVE RESEARCH** "
- Received **"Women Researcher Award"** in the International Scientist Award on Engineering, Science and Medicine, VDGOOD Professional Association on August 2021.
- Received "**Woman Academic Mentor of the year 2022 Award"** from Women Power India Awards 2022 by RAJ SQUARE CHARITY FOUNDATION & MSME CHAMBER OF COMMERCE & INDUSTRY OF INDIA on March 2022.
- Received "**GEM OF MENTOR OF INDIA**" award from ATAL Innovation Mission during the period 2020-2021.

- Received "**Top Performing and Most Popular Mentor for students in ATL Tinkerpreneur 2021**" award from ATAL Innovation Mission.

Responsibility:

1. As a Mentor of Change (MoC), Assigned by AIM, NITI AAYOG -ATL, SHREE NIKETAN MATRICULATION HIGHER SECONDARY SCHOOL, TIRUVALLUR.
2. Coordinator and Organizer for various workshops, Seminars, STTP, National conference and International conference.
3. Received Grant from CSIR, BRNS, ISTE, TNSCST to organize National workshop, Conference, STTP and Seminar.
4. IETE Chennai Centre Executive Committee Member during 2006-2008.
5. IETE Chennai Centre Co Opted Executive Committee Member during 2017-2018, 2022-24
6. IETE Chennai Centre Executive Committee Member during 2018-2020.
7. Examiner for AMIETE & DIPIETE Practical Exam.
8. Observer for AMIETE & DIPIETE theory Exam.

INVITED TALKS

1. Delivered a lecture on Develop Effective Collaborative Proposals at FDP on Research Methodolgy &Teaching at Shri Krishnaswami College for Women on October2022.
2. Delivered a lecture on "B**iometrics for Healthcare Applications**" at Sri Venkateshwara College of Engineering, Sriperumbudur on June 2021.
3. Delivered a Keynote on **"Biometrics in Healthcare"** in National Virtual Conference on Innovations in Engineering, Science& Technology (NVCIEST 2021) at Kalasalingam Institute of Technology on 25& 26 March 2021.
4. Delivered a Keynote on **"Biometrics in Women Safety and Childcare Authentication"** in First International Conference for Women in Multifaceted Research (ICWMR 2021-Special Session on WISE on 8th March 2021.
5. Delivered short course on "**Signal Processing and Deep learning techniques for the development of Intelligent Healthcare systems**" in IEEE Technically sponsored Internal Conference on Communication, Computing and Internet of Things, February 2018.
6. Delivered a lecture on "**An overview of Multibiometrics**"at IETE Chennai Centre on Dec 2012.

REVIEWER & SESSION CHAIR

1. Reviewer for International Conference on Nextgen Electronic Technologies - Silicon to Software(ICNETS2), 2017 -VIT University, Chennai.
2. Reviewer for IEEE International Conference on Computing and Communication Technology (ICCCT'17) at Sri Sairam Engineering College, Chennai.
3. Reviewer for ACM International Conference on Deep Learning Technologies (ICDLT 2017)), which will be during June 2-4, 2017, Chengdu, China.
4. Reviewer for IEEE 3rd International Conference on Inventive Computation Technologies (3rd ICICT 2018) during Nov 15-16, 2018 by RVS Technical Campus, Coimbatore, Tamilnadu, India.
5. Reviewer and Technical Committee member for the ACM International Conference on Communication and Information Processing Information system (ICCIP'18), November 2-4, 2018 | Academic Exchange Center in Ocean University of China.
6. Reviewer for the IEEE International Conference on Communication and Information system (ICCIS'18), Nanyang Technological University, Singapore on December 28-30
7. Reviewer for the IEEE 4th International Conference on Image, Vision and Computing will be heldduring July 5-7, 2019 in Xiamen, China.
8. Reviewer for the International Conference on Communication and Information Processing (ICCIP2019) will be held in Chongqing, China during November 15-17, 2019
9. Reviewer for 6th International Conference on Deep Learning Technologies (ICDLT 2022)), which will be during July 26-28, 2022, Xian, China.
10. Reviewer for IEEE International Conference on Computing and Communication Technology (ICCCT'21) at Sri Sairam Engineering College, Chennai.
11. Reviewer and session chair for the International Conference on Communication and Information Processing (ICCIP2021) will be held in Beijing, China during December 16-18, 2021.
12. Reviewer for IEEE International Conference on Communication Computing and Internet of Things (IC3IOT'22) at Sri Sairam Engineering College, Chennai.

EDITOR

International journal of advances in signal and image sciences

Technical committee member

- Technical program committee member of ACM-ICDLT 2017. :http://www.icdlt.org/committee.html
- Technical program committee member of ACM-ICDLT 2018 https://easychair.org/cfp/ICDLT2018
- Technical program committee member of ICCIP 2019 http://www.iccip.org/committee.html
- Technical program committee member of ICIVC 2019 http://www.icivc.org/committee.html
- Technical program committee member of ICCIP 2020 http://www.iccip.org/committee.html

PATENTS

1. **"System and method to control turn indicators of automobiles"**

   Application No: 201941019210 A**. (Granted)**

2. . **"A Wearable Apparatus to Detect and Monitor Personal Health".**

   Indian Patent, June 2020. Filing Number – 202041027319. (Published)

3. **"An Internet of Things (IoT) Based Airbag Apparatus".**

   Indian Patent, June 2020. Filing Number – 202041027335. (Published)

4. "**IoT Based Smart Multi-Functional Ventilator System and Thereof**",Indian Patent, August

   2020. Filing Number – 202041036386**.. (Granted on 01.08.22 patent Number:402746)**

5. **"Internet of Things (IoT) Based Ultraviolet (UV-C) Disinfecting and Pest Controlling Device"**, Indian Patent, September 2020. Filing Number - 202041039129. (Published)

6. **"Method and Automated Health Machine for Providing Healthcare Services to Patients Using IoT"**. Indian Patent, October 2020. Filing Number – 202041047240.(Published)

7. **"Multi-functional Touch Free Hand Sanitizer Device",** Indian Patent, October 2020. Filing Number - 202041043062. (Published)

8. **"Smart Wireless Fidelity and Charging System with In-built Internet Router",** Indian Design Patent, June 2022, Patent Number - 366627-001.

9. "**Automatic Health Machine**". Indian Design Patent, September 2022,

   Patent Number - 370395-001**. (Granted)**

10. "**Solar Powered IoT Enabled Sanitizer Dispenser**". Indian Design Patent, October 2022, Patent Number - 372909-001. **(Granted)**

11. "**Smart Wireless Fidelity and Charging System**", International Copyrights, October 2022, Copyrights Number - 18784201022S069.

12. "**Automatic Health Machine**". International Copyright, October 2022, Copyrights Number -

18784201022S052.

PROJECTS

Sl. Nos.	Project Title	Funding Agency	Approved Budget	Status
1.	"Comparative Study of Image Processing Techniques for Measuring In-Situ Bow of FBR Fuel subassembly"	DAE-BRNS	Rs 24, 48,650/	Ongoing
2.	"A low-cost smart ventilator using IoT"	SEED Funding-MHRD&NIT, Trichy	Rs 70,000/ (+ Patent cost) (Patent Granted)	Completed
3.	"Smart Rapid Virus Test Kit with IR Thermometer"	SEED Funding-MHRD&NIT, Trichy	Rs 10,000/	Completed

PROGRAMS ORGANIZED

- Workshop on "Wireless communication & Radiating system" March03-04,2011-CSIR Grant Rs30,000/-
- Workshop on " Recent trends in Antennas for Multi field application" May 03-05,2012-DRDOGrant-Rs 35,000/-
- National Conference on "Advanced Communication and Computing Techniques" Mar 18-19,2013-BRNS Grant-Rs 50,000/-
- Short term Training Program on "Recent trends and Research Issues in Wireless communication",03-08, Aug 2015- ISTE Grant-self-supporting.
- National Workshop on "Healthy long life for senior citizens", Aug 2018-TNSCST Grant- Rs20,000/-
- 2nd Elders' Day organized on the theme of "HEALTHY AGING THROUGH YOGA andNATUROPATHY on 4 th October 2018.
- National Conference on "Advanced Communication and Computing Techniques" NCACCT28.04.2011 – 29.04.2011
- National conference on "Emerging Trends in Communication & Information Technology"(NCETCIT) 1st &2nd March 2012.
- National Conference on "Advanced Communication and Computing Techniques" Mar 18-19,2013(BRNS Sponsored)
- National Conference on "Advanced Communication and Computing Techniques" (NCACCT'14)on 27th & 28th,March 2014.
- International Conference on Broadband and Wireless Technology (ICBWT 2016) in association with ICTACT during June, 23-24, 2016.-ISRO Bangalore Grant-Rs 50,000/-
- Value Added Course on IoT – System, Architecture & Protocols Date: 10-09-2019 to 18-09-2019
- IETE ZONAL SEMINAR & ISF CONGRESS on "SMART ENGINEERING FORSUSTAINABLE DEVELOPMENT" 20 th – 21 st September, 2019.

- Two weeks Internship program on Artificial Intelligence for II & III year students (15 members)-collaborated with SRISHTI TALENTBIZ & ORBIT SHIFTERS.
- Organizer on First International Conference for Women in Multifaceted Research (ICWMR 2021-Special Session on WISE on 8th March 2021. http://icwmr.in/special- session/
- Organizer on IEEE sponsored "International Conference on Smart Technologies in Computing, Electrical and Electronics " (ICSTCEE 2020), Special Session on WISE atREVA University, Bengaluru, India from 9 to 10th October 2020

CONSULTANCY PROJECTS

S.No	Project Title	Funding Agency	Amount	Duration	Contribution
YEAR 2020-21					
1	Multi-functional Touch Free Hand Sanitizer Device	MIT Square Services Private Limited	Rs. 22,000/-	3 Months	International Conference Publication & patent 202041043062
2	Face Protective Gears	MIT Square Services Private Limited & Raj Square Charity Foundation	Rs. 85,000/-	2 Months	CSR Activity
3	a)AutoImpilo: Smart Automated Health Machine using IoT to Improve Telemedicine And Telehealth b)PowerVolt: Wireless Charging of Mobile Devices Using Renewable Power Generation System	MIT Square Services Private Limited	Rs 10,000/	6 Months	Registration & Joint Publication IEEEExplore,Scopus ICSTCEE & Women in Science & Engineering **(WISE)**
4	Opportunities of Adopting AI-Powered Robotics to Tackle COVID-19	MIT Square Services Private Limited	Rs. 6,637/-	3 Months	Registration & Joint Publication IEEE Explore (COMSNETS) 2021
5	Automatic Health Machine for COVID-19 and Other Emergencies	MIT Square Services Private Limited	Rs. 6,637/-	3 Months	Registration & Joint Publication IEEE Explore COMSNETS 2021)
6	A Wearable Apparatus to Detect and Monitor Personal Health	MIT Square Services Private Limited	Rs 18,000/-	3 Months	Filing Patent 202041027319
7	An Internet of Things (IoT) Based Airbag Apparatus	MIT Square Services Private Limited	Rs 18,000/-	3 Months	Filing Patent 202041027335.
8	Internet of Things (IoT) Based Ultraviolet (UV-C) Disinfecting and Pest Controlling Device	MIT Square Services Private Limited	Rs 18,000/-	3 Months	Filing Patent 202041039129

9	Method And Automated Health Machine For Providing Healthcare Services To Patients Using IoT	MIT Square Services Private Limited	Rs 18,000/-	3 Months	Filing Patent 202041047240
Year 2021-22					
10	Healthcare Apps for Post-COVID Era: Trends,Challenges and Potential Opportunities	MIT Square Services Private Limited	Rs. 12,500/	3 Months	Project & Publication In Scopus
11	Smart Wireless Fidelity and Charging System with In-built Internet Router	MIT Square Services Private Limited	Rs. 10,000/-	6 Months	Filing Patent June 2022, Patent Number - 366627-001

PUBLICATIONS

1. Divya Ganesh, Kishore Kumar Balaji, **Sumathi Sokkanarayanan**, Sharanya Rajan, Mithileysh Sathiyanarayanan, **"**Healthcare Apps for Post-COVID Era: Trends, Challenges and Potential Opportunities", IEEE Delhi Section Conference (DELCON) 2022**. DOI:** 10.1109/DELCON54057.2022.9753258, **(Scopus Indexing)**

2. M Duraiselvam, Gayathri S, Ranjana R, Khyathi P, **Sumathi Sokkanarayanan**, Mithileysh Sathiyanarayanan, "Smart Multifunctional Vital Testing Kit for Patients"**,** IEEE Delhi Section Conference (DELCON) 2022**. DOI:** 10.1109/DELCON54057.2022.9753350 **(Scopus Indexing)**

3. G Pooja, Deepika R, Shervena B, **Sumathi S** "Despercredito - Smart Garbage System" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) 2022.DOI: **10.1109/IC3IOT53935.2022.9767895 (Scopus Indexing)**

4. Nazeeya Anjum N , **Sumathi S**, J. V. Anand and Ganesh Babu T. R. , " Design of a Practical Miniaturized Antenna to Support IoT Applications", Antenna Design for Narrowband IoT: Design, Analysis, and Applications, 2022, DOI: 10.4018/978-1-7998-9315-8

5. Srinidhi Srinivasan, Rubasri Sundar, Hemavathi S, **Sumathi Sokkanarayanan,** Mithileysh Sathiyanarayanan, "Face Recognition and Mask Detection Technology for Surveillance Systems**",** IEEE 4th International Conference on Computing and Communications Technologies (ICCCT) 2021. **DOI:** 10.1109/ICCCT53315.2021.9711831 **(Scopus Indexing)**

6. Abirami Anandasabesan**,** Soundarya Mahamani**,** Haritha Sree Soundararajan**,** Shanthi Natarajan**, Sumathi Sokkanarayanan,** Mithileysh Sathiyanarayanan**, "**Work-in-Progress: Smart Automatic Regeneration of Electricity using Thermoelectric Generator Technology", IEEE 4th International Conference on Computing and Communications Technologies (ICCCT) 2021. DOI: **10.1109/ICCCT53315.2021.9711775**

7. Kajol Mohanty, Subiksha S, Kirthika S, Sujal BH, **Sumathi Sokkanarayanan**, Panjavarnam Bose, Mithileysh Sathiyanarayanan, "AI-powered Robotics and Covid19: Challenges and Opportunities", Robotic Technologies in Biomedical and Healthcare Engineering Chapter 6, CRC Press, Taylor & Francis Group, USA, 2021. eBook ISBN9781003112273

8. Kajol Mohanty, Subiksha S, Kirthika S, Sujal BH, **Sumathi Sokkanarayanan**, Panjavarnam Bose, Mithileysh Sathiyanarayanan, "Opportunities of Adopting AIPowered Robotics to Tackle COVID-19", IEEE 13th International Conference on Communication Systems & Networks (COMSNETS), 2021. **DOI:** 10.1109/COMSNETS51098.2021.9352866 **(Scopus Indexing)**

9. Divya, G, Gayathri, S, **Sumathi, S**, Panjavarnam.B, Sharanya, R, Mithileysh, S, "Automatic Health Machine for COVID-19 and Other Emergencies", IEEE 13th International Conference on Communication Systems & Networks (COMSNETS), 2021. **DOI:** 10.1109/COMSNETS51098.2021.9352866. **(Scopus Indexing)**

10. Divya Ganesh, Gayathri Seshadri, **Sumathi Sokkanarayanan**, Panjavarnam Bose, Sharanya Rajan and Mithileysh Sathiyanarayanan, " AutoImpilo: Smart Automated Health Machine using IoT to Improve Telemedicine and Telehealth", IEEE sponsored "International Conference on Smart Technologies in Computing, Electrical and Electronics " (ICSTCEE 2020), REVA University, Bengaluru, India from 9 to 10th October 2020.**(Scopus Indexing)** DOI: 10.1109/ICSTCEE49637.2020.9277223

11. Sridhar Muthu, Vignesh Ravisekar, Abishek Anand Anandhan Sasimahadevi, Thirumalai Mohan, Aswin Baskaran, Vedanarayanan Sridheepa Rajagopalan, Divya Ganesh, **Sumathi Sokkanarayanan** and Mithileysh Sathiyanarayanan, " Power Volt: Wireless Charging for Mobile Devices Using Renewable Power Generation System", IEEE sponsored "International Conference on Smart Technologies in Computing, Electrical and Electronics " (ICSTCEE 2020), REVA University, Bengaluru, India from 9 to 10th October 2020. **(Scopus Indexing) DOI:** 10.1109/ICSTCEE49637.2020.9277113

12. **Dr. Sumathi Sokkanarayanan** , Nikitha. S , Renuka Devi.K, Nandhinee.A , "Intelligent Automatic Decision Making Car Parking And Slot Allocation Management System Using Raspberry Pi" Ilkogretim Online - Elementary Education Online, 2020; Vol 19 (Issue 4): pp.6561-6566 http://ilkogretim-online.org doi: 10.17051/ilkonline.2020.04.765061

13. Sathish G, Santhosh V, Deepak S, Sri Varshan, **Sumathi Sokkanarayanan**, Mithileysh Sathiyanarayanan, "Importance of Automatic Hand Sanitizers to Improve Health and Hygiene of Individuals During Pandemic", 10th International Online Conference on Impact of COVID-19 on Local & Global Economy & Recovery Strategies, In the proceedings of Impact of COVID-19 on Education, Technology and Agriculture, June 2020, Pg. 34-44, ISBN: 978-81-947149-7-2.**(Best Research Paper)**

14. Subiksha S, Kirthikka S, Kajol Mohanty, **Sumathi Sokkanarayanan,** Mithileysh Sathiyanarayanan, "Mobile UV-C Sanitizer: IoT Based UV-C Disinfecting Device to Sanitize Public Places", 10th International Online Conference on Impact of COVID-19 on Local & Global Economy & Recovery Strategies, In the proceedings of Impact of COVID-19 on Manufacturing and Services, June 2020, Pg. 178-182, ISBN: 978-81- 947149-6-5

15. Shalini Gnanavel, Saranya M, Kanmani E, **Sumathi Sokkanarayanan** Mithileysh Sathiyanarayanan "Quality Detection of Fresh Fruits and Vegetables to Support Horticultural and Agro-industri" IEEE Fourth International conference on contemporary Computing and Informatics (iC3I 2019),12-14 Dec 2019. **(Scopus Indexing) DOI:** 10.1109/IC3I46837.2019.9055558

16. Balasubramaniam Anbu, Bharathwaj Krishnan, **Sumathi Sokkanarayanan**, Mithileysh Sathiyanarayanan, "A Theoretical Model of IoT-based Two-Wheeler Auto-Indicator System to Advance Traffic Violation" IEEE Fourth International conference on contemporary Computing and Informatics (iC3I 2019),12-14 Dec 2019. **DOI:** 10.1109/IC3I46837.2019.9055708(**Scopus Indexing**)

17. Divya Ganesh, Gayathri Seshadri, **Sumathi Sokkanarayanan**, Mithileysh Sathiyanarayanan,Sharanya Rajan, "IoT-based Google Duplex Artificial Intelligence Solution for Elderly Care" IEEE Fourth International conference on contemporary Computing and Informatics (iC3I 2019),12-14 Dec 2019. **DOI:** 10.1109/IC3I46837.2019.9055551(**Scopus Indexing**)

18. Mithileysh Sathiyanarayanan, **Sumathi S,** "Understanding the Emergence and Importance of Block chain-based Cyber-physical Social Machines: A Proposal" IEEE Fourth International conference on contemporary Computing and Informatics (iC3I2019), 12-14 Dec 2019. **DOI:** 10.1109/IC3I46837.2019.9055513 (**Scopus Indexing**)

19. R Dhianeswar T Naveen Kumar N Kishore K Ashwinn **S Sumathi**. "Enhanced Ambulance Service Using Transmitter and Receiver" IEEE 3rd International Conference on Communication and Information Systems (ICCIS), 28-30 Dec. 2018 **DOI:** 10.1109/ICOMIS.2018.8645050 (**Scopus Indexing**)

20. R Dhianeswar M.Gowtham **S Sumathi**. "The smart trolley with automatic master follower and Billing System" International Conference on Computer Networks, Big Data and IoT (ICCBI 2018), 19& 20 December 2018. Lecture Notes on Data Engineering and Communications Technologies, Springer International Publishing (**Scopus Indexing**). https://link.springer.com/chapter/10.1007/978-3-030-24643-3_92. pp 778–791.

21. B. Rajalakshmi **S. Sumathi** "Survey Of Multimodal Biometric Using Ear And Finger Knuckle Image" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) on 15-17 Feb.2018. **DOI:** 10.1109/IC3IoT.2018.8668109 (**Scopus Indexing**)

22. M. Devadharshini M. Aruna Rajeswari **S. Sumathi**. "An Automated Approach to Weed Out Prosopis Juliflora (Karuvelam) Trees" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) on 15-17 Feb. 2018 **DOI:** 10.1109/IC3IoT.2018.8668166 (**Scopus Indexing**)

23. K Poornisha M R Keerthana **S. Sumathi** . "Bore well water quality and motor monitoring based on IoT gateway" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) on 15-17 Feb. 2018 **DOI:** 10.1109/IC3IoT.2018.8668147 (**Scopus Indexing**)

24. M. Akshaiya M.S. Akshaya G. Alagu Lakshmi **S. Sumathi**. "A GPS Based Dengue Risk Index to Predict the Susceptibility of an Individual" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) on 15-17 Feb. 2018**DOI:** 10.1109/IC3IoT.2018.8668111 (**Scopus Indexing**)

25. R.Dhianeswar **S. Sumathi** K. Lakshmi Joshitha "Automatic Gas Controller" IEEE International Conference on Communication, Computing and Internet of Things (IC3IoT) on 15-17 Feb. 2018 **DOI:** 10.1109/IC3IoT.2018.8668178 (**Scopus Indexing**)

26. C.Nivetha, **S.Sumathi**, "Retinal blood vessels extraction and detection of exudates using wavelet transform and PNN approach for the assessment of diabetic retinopathy", IEEE International

Conference on Communication and Signal Processing (ICCSP' 17), Adhiparasakthi Engineering College, Chennai, 6-8 April 2017. **DOI:** 10.1109/ICCSP.2017.8286743 **(Scopus Indexing)**

27. R. Tamezheneal **S .Sumathi** "Multimodal Approach For Human Authentication using Sclera and Ear" , International conference on next generation silicon to software ICNETS2 ,Vit Chennai March 23-25 2017.

28. R.Tamezheneal, **Dr.S.Sumathi**, "Implementation Of Biometric Smart Card Using MultiBiometrics" IEEE International Conference on Trends in Electronics and Informatics (ICEI 2017) on 11, 12 May 2017, SCAD College of Engineering and Technology Cheranmahadevi, Tirunelveli, Tamil Nadu,ISBN: 978-1-5090-4257-9,Pp:777 – 782. **(Scopus Indexing)**
DOI: 10.1109/ICOEI.2017.8300810

29. **S. Sumathi**, R. Poornima, T. Haripriya "Implementation of multimodal neonatal identification using Raspberry Pi 2". ICCIP 2016 Proceedings of the 2nd International Conference on Communication and Information Processing, Pages 88-92 Singapore, November 26 - 29, 2016, ACM New York, NY, USA ©2016 .**Scopus Indexing**, EI Compendex Indexing.

30. S.Nithya, **Dr.S.Sumathi**, "Biometric Authentication Using Finger knuckle print" International Conference on Broadband and Wireless Technologies, ICBWT'16, Sri Sairam Engineering College, Chennai, 23rd and 24th June, 2016.

31. K.Prakash, **Dr.S.Sumathi**, "Implementation of Bimodal neonatal identification using Raspberry Pi" International Conference on Adaptive Technologies for Sustainable Growth, ICATS'16, Pavai Engineering College, Namakkal, 13th and 14th May, 2016.

32. S.Sivaranjani, **S.Sumathi**., 'Implementation of fingerprint and newborn footprint feature extraction on raspberry pi', IEEE and DRDO sponsored 2nd**IEEE** International conference on innovations in information, Embedded and Communication Systems (ICIIECS'15) on 19th march 2015, Department of Electronicsand Communication, Karpagam College of Engineering. Coimbatore, Tamil Nadu, India. **(Scopus Indexing)**

33. S.Sivaranjani, **S.Sumathi**., 'A technique to implement bimodal biometrics, for preventing infant mix-ups using raspberry pi', 2nd international conference on Bio signals, Images and instrumentation, center for health care technologies and department of biomedical engineering and department of Biomedical Engineering SSN college of Engineering on March 2015.

34. S.Sivaranjani, **S.Sumathi**., 'A Review on implementation of bimodal newborn authentication',International conference **IEEE** GCCT 2015, Electronics and Communication

Engineering, Noorul Islam Centre for higher Education, Nagarcoil on April 2015. **(Scopus Indexing) DOI:** 10.1109/GCCT.2015.7342664

35. **Sumathi S.** and Rani Hema Malini R. (2013),"Multimodal Biometrics for Person Authentication using Hand Image", International Journal of Computer Applications(IJCA),Vol. 70, No. 24, pp.43-48 .

36. Balameenakshi S.and **Sumathi S.** (2013)" Multi Biometric System for Newborn Recognition", International Journal of Engineering Research and Technology (IJERT). ISSN: 2278-0181. Vol. 2, No. 5.

37. Sudarvizhi.S and **Sumathi.S** (2013), " A Review on Continuous Authentication using Multimodal

Biometrics",International Journal of Emerging Technology & Advanced Engineering, ISSN 2250-2459, Volume 3, Special Issue 1.

38. Balameenakshi S., **Sumathi S.** and Rani Hema Malini R. (2013)"Identity Verification of Newborn Using Biometrics", International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622. National Conference on Advanced Communication & Computing Techniques (NCACCT-19 March 2013, Chennai), pp.16-22

39. Balameenakshi S. and Sumathi **S.** (2013), "Biometric Recognition of Newborns: Identification using Footprints", **IEEE** International Conference on Information and Communication Technologies(ICT), Noorul Islam Centre for Higher Education. ISBN No 978-1-4673-5758-6, pp.737-742, April 11-12. **(Scopus Indexing)**

40. Sumathi S. and Rani Hema Malini R.(2012) "Multibiometric Authentication Using DWT and Score level Fusion", European Journal of Scientific Research", ISSN 1450-216X, Vol. 80, No. 2, pp. 212-223,(SNIP 0.493, SJR 0.229). **(Scopus Indexing)**

41. **Sumathi S**. and Rani Hema Malini R. (2012) Multi Algorithm Approach for Face Recognition Using Average Half Face" Journal of Computer Application. Vol 5 Issue 4 Dec 2012. ISSN No: 0974-1925

42. **S.Sumathi**, D.Bhuvani Dayal, D.Priyadarshini and Subhameenakshi(2012), "Abduction of Newborn Infants using Footprint Recognition", CIIT International Journal of Biometrics and Bioinformatics, Vol 3,No 20,June 2012. ISSN 0974 – 9675.

43. **S.Sumathi** , Archna, Pracitha(2012) "Palatal Rugae and Dental Work Information-Tools of Human Identification", CIIT International Journal of Biometrics and Bioinformatics, Vol 3,No 20,June 2012. ISSN 0974 – 9675.

44. **Sumathi S**., Rani Hema Malini R. and Thulasibai V. (2012), "Face recognition - Multi algorithmic Approach Using Average Half Face", Indian Journal of Innovation and Development (IJID), ISSN No 2277-5390, Vol. 1, No. 12, pp. 5-9.

45. **Sumathi S**. and Rani Hema Malini R. (2012), "Multi Biometric system Using Efficient Method of DWT", International Conference on "Advances in Electrical, Electronics, Information, Communication and Bio-Informatics" AEEICB – 12, at Prathyusa Institute of Technology and management, Jan 24-25 .

46. **Sumathi S.** and Rani Hema Malini R.(2012), "Person Identification Using Palm Print Features With an Efficient Method of DWT", International Conference on Recent trends in Computing, Communication and information Technologies, VIT, Vellore. ObCom 2011, Part II, CCIS 270, pp. 337–346, Springer -Verlag Berlin Heidelberg 2012.ISSN 1865-0929 ISBN No 978-3-642-29215-6. **(Scopus Indexing). https://link.springer.com/chapter/10.1007/978-3-642-29216-3_37**

47. Sherin Edward, **Sumathi S.** and Rani Hema Malini R. (2011), "Person Authentication using Multimodal Biometrics with Watermarking", **IEEE** International Conference on Signal Processing, Communication, Computing and Networking Technologies (ICSCCN), Noorul Islam Centre for Higher Education. ISBN No 978-1-61284-653-8, pp.100-104. **(Scopus Indexing)**

48. **Sumathi S**. and Rani Hema Malini R.(2011), "Efficient Identification System Using Wavelet Transform and Average Half-Face", CiiT International Journal of Digital Image Processing, ISSN

0974–9691 & Online: ISSN 0974–9586, Vol. 3, No. 20, pp.1259-1263.

49. **Sumathi S**. and Rani Hema Malini R. (2011), "An Efficient Method for Person Identification Using Wavelet Transform with Palm Print Features", National Journal on Electronic science and Systems (NJESS), ISSN No: 0975-7325, Vol. 2, No. 1, pp. 51- 56.

50. **Sumathi S.** and Rani Hema Malini R.(2010) "Average-Half-Face for face Recognition using PCA & Wavelet Transform", International Journal on Intelligent Electronic Systems (IJIES), ISSN 0973-9238, Vol. 4, No.2, pp. 49-55.

51. **Sumathi S.** and Rani Hema Malini R. (2010), "Face Recognition System to Enhance E-Health", **IEEE** International Conference on e-Health Networking, Digital Ecosystems and Technologies (EDT 2010) Shenzhen, China, ISBN No 978-1-4244-5517-1, Vol. 1, pp. 195-198. **(Scopus Indexing)**

52. **Sumathi S.,** Gnana Prakasam S. and Rani Hema Malini R. (2010) "Face Recognition - Average-Half-Face Using Wavelets", International Conference on Image processing, computer Vision, & Pattern Recognition (IPCV'10)   Las Vegas, USA, ISBN No 1-60132-152-X, July 12-15, Vol. 1, pp. 337-342.

53. Gnana Prakasam S **Sumathi S.,**. and Rani Hema Malini R. (2010), "Average-half-face in 2D and 3D using wavelets for face recognition", International conference on Signal processing, WSEAS, Stevens Point, Wisconsin, USA,**ACM Digital Library**, PP 107-112, ISBN: 978-954-92600-4-5. **(Scopus Indexing)**

54. S.Rajalakshmi and **S.Sumathi** "Mapping of 40 MHz MIMO SDM-OFDM Base band Processing on MultiProcessor SDR Platform" ICICT 09 Sri Sairam Engg College16-18 Dec 09.

National Conference Attented/Presented

Sl No	Title	Date	Venue/Duration
1.	Image compression in mobile multimedia services using wavelets.	Apr 2005	Bharath Institute of Higher Education And Research. Chennai.
2	Image compression in mobile multimedia services using wavelets.	Aprl 2005	Adhiyaman college of engineering,Hosur.
3	Energy Efficient wavelet for water marked video.	June 2006	Anna university,Chennai.
4	Personal authentication using multi-biometric system.	Jan 2008	St.Peter's Engineering College, Chennai.
5	Facial identification system usingPCA	Feb 2009	National Conference on**"Biomedical Electronics &Biomedical Informatics"**,Sponsored by DRDO, New Delhiand IETE Sri Sairam Engineering College, Chennai
6	Person Authentication using Palmprint.	Feb 2009	National Conference on**"Biomedical Electronics &Biomedical Informatics"**,Sponsored by DRDO, New Delhi and IETE Sri Sairam Engineering College, Chennai
7	Face recognition system usingPCA	July 2009	St.Peter's Engineering College,Chennai.

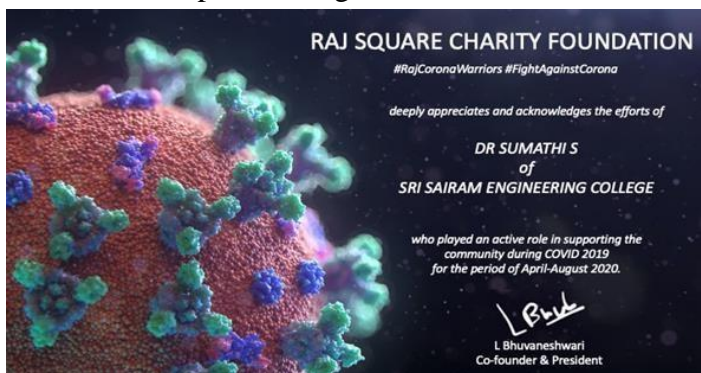| 8	Average-Half-Face in 2D and 3Dusing Wavelets for Face Recognition.	March 19, 2010.	Vellammal Engineering college,Chennai
9	Biometric Identification Using Palm print"	29th & 30th April 2009	NCETETA-09 at Shiridi Sai Engg College, Bangalore
10	Average-Half-Face in 2D and 3D using Wavelets for Face Recognition	March 2010	Eswari Engineering college, Chennai
11	Multi biometric system for identification and verification	30 &31st July 2010.	National conference on computingconcepts in current trends at Sathyabama university
12	Use of Energy Efficient Technology	25-26Sep 2010.	53rd IETE Annual Technical Convention. IETE, Delhi
13	Verification System in Multimodal Biometrics	28th Feb and 1st March.2011	**National conference on Recent Advances in Communication,Electrical and Electronics and Information Technology,RACEIT-2011.**IETE Chennai Centre andPrathyusha Institute of Tech andmanagement.
14	Digital Rights management Using Multimodel Biometrics	25,26,Feb 2011.	National Conference on Signals,Systems and Technologies in media. Karunya University
15	Digital Rights management UsingFace and iris features	7,8,April 2011	4th National Conference on VLSI,Embeded systems,Signal Processing and Communication Technologies,NCVESCOM-2011.Arupadai Veedu Institute of Technology,Vinayaka MissionsUniversity
16	Highly Secure Hand based Multimodel Biometric system	7,8,April 2011	4th National Conference on VLSI,Embeded systems,Signal Processing and Communication Technologies,NCVESCOM-2011.Arupadai Veedu Institute of Technology,Vinayaka Missions University
17	Webcam Based Multimodel Biometrics For Person Authentication	10&11,March 2011.	National Conference on Emerging Computing and Communication Technologies. NECCT 2011. Kongu Engg College
18	Highly Secure Hand based Multumodel Biometric system	29.4.2011.	National Conference on Advanced Communication and Computing Techniques..NCACCT 2011. Sri Sairam Engineering College, Chennai
19	Biometrics based on Dental work information for identifying humans.	20,21 April 2012	National Conference on ExpandingHorizon in computer, Information Technology,Telecommunication & Electronics,EXCITE 2012.IETE,Chennai Center.
20	New born Identification Using Footprint Biometrics	20,21 April 2012	National Conference on ExpandingHorizon in computer, Information Technology,Telecommunication & Electronics,EXCITE 2012.IETE, Chennai Center.

Workshop/Conferences/FDP:

1. Attended National seminaron"TrendsinBiomedical Instrumentation" at Shanmuga college of engineering, Thanjavur, Sep 2000.

2. Attended International conference on "Advances in telecommunications and Information Technology" at Vellore Engineering College from 14th & 15th Dec 2000.

3. Attended Short term training programme on "Computer communication & networking" conducted by TTTI,Taramani from 3.9.01 to 7.9.01

4. Attended Workshop on "Teaching technology and counseling skill" at Abirami Academy at Sri Sai Ram Engineering College on 24th Feb 2001.

5. Attended 3 Day Seminarcum Workshopon VLSi Designand Embedded System Technologyat Sri Sai Ram Engineering College from 26th –28th July 2002 .

6. Attended Workshop on "Direct to Home Technologies" conducted by Broadcast Engineering society on 9th July 2004 .

7. Attended Workshop on "Wireless & wireline communication" conducted by Institute of Engineers &IETE society on 21st June 2004 .

8. Attended Internationalconferenceon"INCON-CCC"atSriSaiRamEnggcollegeon20th—22nd Aug.
9. Attended UGC Sponsored Refresher Course On" MODERN MOS TECHNOLOGY_TOOLS AND DESIGN" at Sathyabama Institute of Science and Technology, Chennai. From 28.11.05 to 17.12.2005.

10. Attended TNSCST & National Council for Science and Technology Communication Sponsored National Workshop On "ADVANCES IN COMMUNICATION TECHNOLOGIES AND NETWORKS" at SSN college of Engineering, Chennai during 4th &5th august 2006.

11. Attended seminar on "Broadcasting Emerging Technologies in mobile world" on 8.9.06 organized by Broadcasting Emerging societyChennai chapter.

12. Attended one day Workshop on "Networks & Security " conducted at Dept of ECE, Sri Sai Ram Engineering College and Benchmark on 22.9.06.

13. Attended Staff Developmentprogrammeon"Information Technology in Telemedicine& E- health" conducted at Sri Sai Ram Engineering College from 9th–21st July2007 .

14. Attended oneday Workshopon"Emerging Trends inVLSI and ASICDesigns" conductedat Dept of ECE, Anna university. April07.2007.

15. Attended National Conference on Advanced techniques in Instrumentation, Control & Communication Engineering at St.Perter's Engineering College/ Jan 24th -25th 2008.

16. Attended National workshop on Recent trends in wireless information networks and systems- SriSai RamEngg. College, Sponsored by DRDO Feb 1st '08.

17. Attended National seminar on Research issues in digital image processing- Mepco Schlenk Engineering college,sivakasi. March 21st '08

18. Attended Workshop on Intellectual property rights awareness and related issues- TCS and Patent office, Govt of India- April 30th '08.

19. Attended WorkshoponGettingstartedwithMATLAB- OrganizedbyRaghuram Associates held at Sri Sairam Engineering College- June 30th – July 3rd '08

20Attended.National Conference on Biomedical Electronics and Biomedical Infomatics at Sri Sairam Engineering College, Chennai/ Feb 5th & 6th '09.

21. Attended National Conference on Advanced Techniques Instrumentation "Advanced Techniques in Instrumentation Control and Communication Engineering" on 23rd July 09 at St.Peters University, Avadi,Chennai.

22. Attended National workshop on How to do Research at Sathyabama Institute of Science and Technology, Chennai on 7 & 8 th Aug 2009.

23. Attended Nationalworkshop on future directions in imageprocessing & analysis at SSN Engg college on 20 &21 Aug 09.

24. Attended seminar on "Broadcasting in Digital Era on 26.09.2009 organized by Broadcasting Emerging society Chennaichapter.

25. Attended Nationalworkshopon"Future Directions inImage Processingand Analysis" organized by Department of computer science & Engineering,SSN college of Engineering during 20-21,August 2009.

26. Attended CSIR Sponsered Faculty development program on Recent Trends in wireless information networks and systems on 7.7.10 at Sriram Engg college.

27. Attended DPT sponsored national seminar on "BIOMEDICAL SIGNAL PROCESSING USING COMPUTATIONAL INTELLIGENCE" organized by The department of ECE School of Communication and Computer Sciences OF KONGU ENGINEERING COLLEGE, Perunthurai is conducting On" on 23rd and 24th July' 2010.

28. Attended "International Conference & Exhibition On BIOMETRIC TECHNOLOGY" organized by Deptof Biomedical Enggorganizedbyorganizedby PSG Collegeof Technology, Coimbatore on 2nd - 4th, September, 2010.

29. Attended CSIR sponsored two day workshop on "Wireless communication and Radiating system"March 21 & 22,2011,at Sri sairam Engg college,chennai.

30. Attended In-Plant Training on "Digital Image Processing" on 19th -23rd December 2011, organized by the department TIFAC-CORE: Machine vision of RAJALAKSHMI ENGINEERING COLLEGE Thandalam, Chennai.

31. Attended one day workshop on "Art of Journal and Thesis Writing" on 19th January 2012, organizedby,DepartmentofResearchand Development, Sri Sai Ram Engineering College. Chennai.

32. Attended Two day workshop on "Writing Effective conference Papers" on 18th & 19th February 2012, organized by Indian Institute of Technology, Bombay, Remote center SRM University, Chennai.

33. Attended one day workshop, Sir C.V. Raman Lecture on "Research Paper Publication in Journals"on30th June2012, organizedby,Institute ofEngineering and Technology(IET), Chennai.

34. Attended Twodayworkshopon"Image Processing Frameworkusing FPGA" on 15th&16th October 2012, organized by Madras Institute of Technology, Anna University and Enixs Technology India Pvt Ltd, Chennai.

35. Attended one day seminar on "Intel Tech Phi Drive" on 18.9.2013 at Taj Kannemara, Chennai.

36. Attended one day seminar on "NITechnicalSymbosium'14" on9.9.2014 at Radisson Blue,St Thomas Mount,Chennai.

37. Attended oneday seminaron "Embedded Linux on Zynq-7000 SOC using Vivado" on 18.9.2015 at VIT Chennai.

38. Attended 4 weeks FDP on "Outcome based Pedagogic principles for effective teaching"-NPTL IIT, Kanpur.

39. Attended International Workshop on "Smart Materials Sensors and Energy Devices" at SSN College of engineering on 6-8 Dec 2018.

40. Attendedonedayseminaron "Methodologies & Practices for profitable research through patents & IPR" at SEC on 4.1.19.

41. Attended Two Weeks Course on Recent trends in Information, Computing, Communication and Teaching Methodology Competency at SEC on 4.05.20 to 17.05.2020

42. Attended AICTE Training and Learning Academy (ATAL) sponsored FDP on "Telemedicine" at RMK Engg College on 14.9.20 to 18.9.20

43. Attended AICTE Training and Learning Academy (ATAL) sponsored FDP on "Artificial Intelligence" at SEC on 07.12.2020 to 11.12.2020.

44. Attended a FDP on Get Ready for AI with MATLAB and Simulink on 18.6.2020 TO 20.6.2020

45. Attended 2020 IEEE EMBS International workshop on Wearable sensors and devices, Artificial Intelligence and wearable markets (WSAIM) on 18.11.2020 &19.11.2020

46. Attended AICTE Training and Learning Academy (ATAL) sponsored FDP on Design Thinking" from 2021-1-4 to 2021-1-8 at C. V. Raman Global University (Formerly C. V. Raman College of Engineering) Bhubaneswar.

47. Attended AICTE Training And Learning (ATAL) Academy Online FDP on "Wearable Devices" from 2021-1-18 to2021-1-22 at University Visvesvaraya College of Engineering.

48. Attended AICTE Training And Learning (ATAL) Academy Online FDP on "Medical Image Processing and 3D Applications"from 2021-7-05 to2021-7-09 at University College of Engineering.

49. Attended a FDP on " Artificial Intelligence in Healthcare" organized by ISTE,Dept of IT SEC on 21.2.22 to 25.2.22.

50. Attended a FDP on "EXPLORING AUGMENTED REALITY/VIRTUAL REALITY USING UNITY TOOL" organized by Computer Soceity of India, Dept of CSE SIT on 11.7.22 to 15.7.22.

Awards & Accomplishments

1. As an IETE coordinator, received **Best ISF award** consecutively for last 4 years 2017, 2018& 2019,2020 (Based on Membership, Activities and Student Achievements)

2. Received **Best ISF (IETE Student Forum) coordinator award** consecutively for last 3years 2018-19, 2019-20,2020-21.

3. Received SEEE (Society for Engineering Education Enrichment) Awards 2020 under the category "**Dr.A.P.J ABDUL KALAM AWARD FOR INNOVATIVE RESEARCH**"

4. Receiving fund from AICTE,/ UGC / DST/ TNSCST, etc for organizing various workshops, Seminars, STTP, Value added course, National conference and International conference.

5. Completed 6 consultancy projects.

6. Visited NUS, NTU &AMITY University at Singapore for attending International Conference.

7. Guiding more than 50 UG & PG project batches.

8. Mentoring on Healthcare projects, such as IoT Based Smart Ventilator, Smart virus test kit, IoT based Airbag to prevent Knee fracture.

9. Mentoring on Autonomous Under water vehicle. Form a team and get a guidance from various resource such as IIITM, NIOT, and team got short listed for Singapore Autonomous under water vehicle contest. http://www.varunatriton.org/

10. Act as a Mentor of Change, Assigned by AIM, NITI AAYOG at SHREE NIKETAN MATRICULATION HIGHER SECONDARY SCHOOL , TIRUVALLUR

11. To create awareness to the younger generation in the theme of Engineers for Elders. Based on the above objective, organized 2 events associated with Dr V.S.Natarajan Geriatric Foundation. "HEALTHY LONG LIFE FOR SENIOR CITIZENS" & "HEALTHY AGING THROUGH YOGA and NATUROPATHY" and also encourage students to do projects in eldercare.

12. Engagement with outside world-As a Key note Speaker, Editor, Reviewer, Technical committee member, Chairperson, Organizer for National & International conferences.

...படங்களை உணர பிரசனைகளைத் தீர்க்கக்கூடிய உபகரணங்கள் மற்றும் அவசர ஆபத்து நேரங்களில் பயன்படும் உபகரணங்கள் பற்றி இளைய பொறியாளர்கள் ஆராய்ச்சி செய்யலாம்`` என்று கூறினார்.

இதைத் தொடர்ந்து சாப்ராம் பொறியியல் கல்லூரியும், டாக்டர் வி.எஸ்.நடராசன் முதியோர் நல அறக்கட்டளையும் இணைந்து 'முதியோருக்கு வேண்டிய உபகரணங்களை தயாரிப்பது' பற்றிய புரிந்துணர்வு ஒப்பந்தம் ஒன்றில் கையெழுத்திட்டன. எனது உரையைக் கேட்டு பல மாணவர்கள், முதியோர்களுக்கு உதவும் உபகரணங்களை செய்து வருகிறார்கள். அவற்றில் சில பற்றி இங்கே...

கீழே விழுதலைக் கண்காணிக்கும் கருவி:

பெரும்பாலான வீடுகளில் ஆண்களைப் போலவே பெண்களும் பணிக்குச் செல்லும் காலகட்டத்தில் வாழ்ந்து வருகிறோம். இதனால் முதியோர்கள் வீட்டில் தனித்திருக்கும் சூழ்நிலை உருவாகியுள்ளது. இப்படிப்பட்ட தனிமையில், 'பாத்ரூமில் வழுக்கி விழுவதே', உயிருக்கு ஆபத்தான விபத்தாகி விடுகிறது. இப்படிக் குளியலறையில் மயங்கி விழும் முதியவர்களுக்கு தக்க தருணத்தில் உதவி கிட்டினால், பெரும் பாதிப்பைத் தவிர்க்கலாம். ஆனால், குளியலறையில் சி.சி.டி.வி வைத்து கண்காணிக்க இயலாது.

இந்தக் கருவி அதே பணியை வித்தியாசமாகச் செய்கிறது. குளியலறை தரையில் ஒரு சென்சார் பொருத்தப்படும். ஒருவர் தரையின் மீது நடக்கும்போதோ, அல்லது விழுந்துவிட்டாலோ, அதனால் ஏற்படும் அழுத்தத்தின் உதவியுடன் கண்காணிக்கும் கருவி இது. கீழே விழுந்து சிறிது நேரமாக எந்த ஓர் அசைவும் இல்லையென்றால், முதியோருக்கு நெருங்கிய உறவினருக்கு ஒரு குறுஞ்செய்தியை இது அனுப்பும். இதனால் தேவையான உதவி கிடைக்கும். முதியோர்களுக்கும் 'தாங்கள் கண்காணிக்கப்படுகிறோம்' என்ற உணர்வு எழாது. ஆனால், எந்த இடத்திலும், எத்தகைய விழும் சூழ்நிலையிலும் இது செயல்படும்.

முதியோருக்கான காற்றுப் பை கருவி (ஏர் பேக்):

திடீரென கீழே விழுந்து எலும்புமுறிவு போன்ற பிரச்னைகளை சந்திக்கும் முதியோருக்கான கருவி இது. கீழே விழுவதை முன்னரே யூகித்து, ஒரு காற்றுப் பையை (ஏர் பேக்) விரிவடையச் செய்து முழங்கால் மற்றும் இடுப்புப் பகுதி காயமடைவதைத் தடுக்கும். கீழே விழுவதை முன்கூட்டியே அறிவதற்கு உடல் இயக்கக் கண்காணிப்பு சென்சார் உபயோகிக்கப்படும். கீழே விழும் தருணத்தை, அல்லது தடுமாற்றத்தை, அசாதாரணமான உடலியக்கமாகக் கருதி, மில்லி விநாடிகளில் காற்றுப் பை விரிவடைந்து காக்கும். இது மூட்டு மற்றும் இடுப்பில் காயம் ஏற்படுவதையும், எலும்பு முறிவையும் தடுக்கும். இது குறைந்த எடையிலானது. எந்த சூழலிலும் செயல்படும்.

(இந்தக் கருவியை உருவாக்கியவர்கள்: நிகிதா, ரேணுகா தேவி, நந்தினி.)

கைநடுக்கத்தைத் தடுக்கும் கருவி:

கைநடுக்கம் என்பது பார்க்கின்சன்ஸ் நோயின் முக்கிய அறிகுறியாகும். இந்த நடுக்கத்தை தடுப்பதற்காக தற்போது பயன்பாட்டில் உள்ள நடுக்கக் கட்டுப்பாடு கருவிகள் அனைத்துமே, முழங்கை மற்றும் மணிக்கட்டு நடுக்கத்தை தடுப்பதற்கு மட்டுமே உதவும். விரல் நடுக்கத்தை தவிர்ப்பதற்கு எந்தக் கருவியும் இல்லை. இதைக் கருத்தில் கொண்டு ஒரு கருவியை உருவாக்குவதற்கு திட்டம் வரையறுக்கப்பட்டது. இதை அணிந்துகொண்டு எதையும் நடுக்கமின்றி விரல்களால் பிடிக்கலாம், வேலைகளையும் செய்யலாம். இதன் விலையும் மலிவுதான்.

(இந்தக் கருவியை உருவாக்கியவர்கள்: ஸ்ரீநிதி, வைஷ்ணவி, விஷாலினி)

மேற்கண்ட கருவிகளை உருவாக்க உதவிய பேராசிரியை திருமதி. சொ.சுமதி, திருமதி. பா.தனுஜா மற்றும் மாணவர்களுக்கு எங்களது அறக்கட்டளையின் சார்பாக நன்றியைத் தெரிவித்துக் கொள்கிறோம்.

(பயணம் தொடரும்...)

ISF AWARD

Best Centre IETE ISF Forum –First Prize for outstanding and exemplary contribution towards conducting of Technical Lecture meetings, Workshops, Students awards in various events Paper Presentation, National & International Conference Inplant training and Industrial Visit. This award is given by IETE, Chennai Centre.

Best ISFs under the jurisdiction of Chennai Centre in 2020-2021.

Best ISFs under the jurisdiction of Chennai Centre in 2019-2020.

Best ISFs under the jurisdiction of Chennai Centre in 2018-2019.

Best ISFs under the jurisdiction of Chennai centre in 2017-2018.

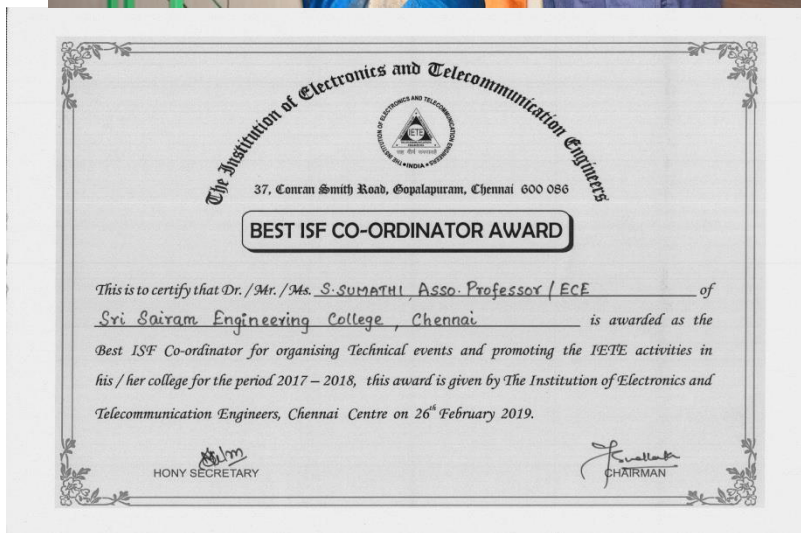**Best ISFs under the jurisdiction of Chennai centre in 2016-2017.**

Best ISFs under the jurisdiction of Chennai Centre in 2011-2012.

Best ISFs under the jurisdiction of Chennai Centre in 2010-2011.

Received the Best ISF Co-Ordinator Award for organizing technical events and promoting the IETE activities in her college for the year 2017-2018. & 2018-2019. by IETE, Chennai Centre.

Visited AMITY University, Singapore on IEEE Fourth International conference on contemporary Computing and Informatics (iC3I 2019),12-14 Dec 2019.

VISITED NATIONAL UNIVERSITY SINGAPORE

Visited Nanyang Technological University, Singapore on 26 th Nov, 2016 to attend the 2nd International Conference on Communication and Information Processing (ICCIP 2016) and presented the paper titled "Implementation of Multimodal Neonatal Identification using Raspberry Pi 2".

2016 2nd International Conference on Communication and Information Processing (ICCIP 2016)