



Dr. S. Yuvaraj., M.E., Ph. D.,  
Yuvaraj.s.ece@psvpec.in

DOB: 03 / 06 / 1986

ORCID Id: 0000-0003-2669-0321

SCOPUS AUTHOR ID: 15923580000

WEB OF SCIENCE RESEARCHER ID: AAR32052020

### OBJECTIVES

Looking for the best opportunity in your esteemed organization where I would be able to utilize and enhance my potential while being resourceful, innovative and flexible.

### CAPABILITIES

- Problem solving abilities
- Good Communication & Presentation skills
- Get along with a team
- Ability to deal with people diplomatically
- Hard cum smart worker

### EDUCATIONAL PROFILE

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks /Grades obtained / Ph. D Awarded (Y?N)	Class obtained
SSLC	X	TAMIL	2002	PACHAYAPPAS HIGHER SECONDARY SCHOOL KANCHIPURAM	STATE BOARD TAMIL NADU	74 %	FIRST
HSC	XII	MATHS, PHYS, CHRY, BIOGY	2004	PACHAYAPPAS HIGHER SECONDARY SCHOOL KANCHIPURAM	STATE BOARD TAMIL NADU	63.1 %	FIRST
U.G	B.E	ECE	2008	KANCHI PALLAVAN ENGINEERING COLLEGE KANCHIPURAM	ANNA UNIVERSITY CHENNAI	68 %	FIRST
P.G	M.E	VLSI DESIGN	2010	ACADEMIC CAMPUS ANNA UNIVERSITY COIMBATORE	ANNA UNIVERSITY COIMBATORE	8.48 CGPA	FIRST
Ph. D	Ph. D	VLSI DESIGN-DIGITAL IMAGE PROCESSING	2019	CEG CAMPUS ANNA UNIVERSITY CHENNAI	ANNA UNIVERSITY CHENNAI	Ph. D Awarded Yes (8 CGPA)	FIRST

Distance Education	PG Diploma	Personnel Management and Industrial Management	2020	DISTANCE EDUCATION ANNAMALAI UNIVERSITY	ANNAMALAI UNIVERSITY	68 %	FIRST
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### **LECTURE EXPERIENCES**

Name of The Organization	Designation	Department	Period		Nature of Work
			From	To	
Prince Shri Venkateshwara Padmavathy Engineering College, Chennai – 127, Tamil Nadu, India	Associate Professor	Electronics and Communication Engineering	14.06.2023	Till	Lecturing, Academic Research, Journals Publications
Meenakshi College of Engineering Chennai – 78, Tamil Nadu, India	Associate Professor	Electronics and Instrumentation Engineering	31/12/2019	13.06.2022	Lecturing, Academic Research, Journals Publications
Meenakshi College of Engineering Chennai – 78, Tamil Nadu, India	Assistant Professor	Electronics and Instrumentation Engineering	19. 04. 2013	30/12/2019	Lecturing, NBA, NAAC, Department Project Coordinator
Meenakshi College of Engineering Chennai – 78, Tamil Nadu, India	Assistant Professor	Electronics and Communication Engineering	19. 04. 2012	18. 04. 2013	Lecturing, Department Placement coordinator
Meenakshi College of Engineering Chennai – 78, Tamil Nadu, India	Assistant Professor	Electronics and Instrumentation Engineering	19. 01. 2011	18. 04. 2012	Lecturing, Class Advisor, Mentor

### **ACADEMIC EXPERIENCES**

- UG project coordinator
- Department Placement coordinator
- Class Advisor
- Mentors and Tutors of the other Class
- NSS department coordinator
- NBA department coordinator
- NAAC department coordinator
- Election Commission's Nodal Officer

## **PROFESSIONAL EXPERIENCES**

- Working as a VLSI Design Engineer at PRIMECHIP India Pvt. Ltd., Nungambakkam, Chennai, Tamil Nadu, India - 600 094 from 23. 06. 2010 to 11. 01. 2011.
- Working as an Embedded Engineer at Synergy Techno System India Pvt. Ltd., Velacherry, Chennai, Tamil Nadu, India - 600 042 from 21.05. 2010 to 22. 06. 2010.

***Title of the Ph. D Thesis: "IMAGE ENHANCEMENT ALGORITHMS FOR LOW RESOLUTION IMAGES USING EVOLVED WAVELET FILTERS"***

***Date of Ph. D Registration: 20.12.2012 for Ph. D in Faculty of Information and Communication Engineering, Department of Electronics and Communication Engineering, College of Engineering, Guindy, Anna University Chennai***

***Date of First DC Research Board meeting: 29.12.2012 in Faculty of Information and Communication Engineering, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University Main Campus, Chennai – 25.***

***Date of Conformation Submission: 27.05.2015 in Faculty of Information and Communication Engineering, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University Main Campus, Chennai – 25.***

***Date of Snopsis Submission: 18.12.2018 in Faculty of Information and Communication Engineering, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University Main Campus, Chennai – 25.***

***Date of Thesis Submission: 07.08.2019 and Date of VivaVoce: 30.12.2019 in Faculty of Information and Communication Engineering, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University Main Campus, Chennai – 25.***

## **AREA OF RESEARCH**

- **Image Processing Enhancement Algorithms**
- **Discrete wavelet transform**
- **Stationary wavelet transform**
- **Low power VLSI system design for CMOS submicron rule under in um, nm ranges**
- **Reconfigurable FPGA architecture for High speed Adders, Multipliers, FIR, IIR Filter design**

## **PROFICIENCY IN COMPUTING TOOLS**

Operating System	:	Microsoft Windows, Linux.
Office Package	:	MS office 2007, 2010,
Programming Languages	:	Basics in C, C ++, Verilog HDL, VHDL and MATLAB.
Design Tools	:	Microwind EDA, Tanner, OrCAD PSPICE, LabVIEW, Simulink, CoDeSys, DSP Code Composer.
Simulation Tools	:	Xilinx ISE, Quartus II, Model Sim, Libero.
Process Control Instrumentation:		Temperature, Pressure, Flow, Level Process Station, Cascade Control Valve, ABB PLC and SCADA, ABB DCS.

## **INDUSTRIAL VISITS**

- **CPRI (Central Power Research Institute), Bangalore, Karnataka, India, in the Year of 2007.**
- **Sciencetech Technologies Pvt. Ltd, Electronic Complex, Pardesipura, Indore, Madhya Pradesh, India in Year of 2011.**
- **Technocraft Automation, Nelson Manickam Road, Chennai, Tamil Nadu, India in the Year of 2012.**
- **Technocraft Automation, Nelson Manickam Road, Chennai, Tamil Nadu, India in the Year of 2013.**
- **Ennore Thermal Power Station TANGEDCO, North Chennai, Tamil Nadu, India in the Year of 2013.**
- **Doordarshan Kendra Broadcast Television network, Chennai, Tamil Nadu, India in the Year of 2015.**
- **Ennore Thermal Power Station TANGEDCO, North Chennai, Tamil Nadu, India in the Year of 2017.**
- **Neyveli Lignite Corporation India Limited (NLCIL), Neyveli, Tamil Nadu, India in the Year of 2017.**
- **M & H Industrial Automation Training, Guindy, Chennai, Tamil Nadu, India in the Year of 2019.**
- **Nokia Siemens, SIPCOT Industrial Park, Hi-Tech SEZ, Panrutti Village, Oragadam Industrial Corridor, Mathur, Kanchipuram,, Chennai, Tamil Nadu, India in the Year of 2020.**

## **AREA OF SUBJECTS**

- **Linear Integrated Circuits**
- **Digital Electronics**
- **Electromagnetic Fields**

- **Microprocessors and Microcontrollers**
- **Analog Electronics**
- **Antenna and Wave Propagation**
- **VLSI Design**
- **Embedded System**
- **Computer Architecture and Networking**
- **Digital Image and Signal Processing**
- **Modern Electronics and Instrumentation**
- **Analog and Digital Communication**
- **Microwave Engineering**
- **Transmission Line and Waveguides**

### **PROFESSIONAL MEMBERSHIP**

- **Member of Association of North America Higher Education International (ANAHEI).**
- **Member of Teaching and Education Research Association (TERA)**
  - **Membership ID: TERAM110205**
- **Member of Institute For Engineering Research and Publication (IFERP)**
  - **Membership ID: PM64097513**
- **Member of Indian Council of Social Science Research (ICSSR)**
  - **Membership ID: PM64097513**
- **Member of Department of Science and Technology, Ministry of Science of Technology, INSPIRE Membership ID and Registration/IVR Number: 202100003550**
- **Member of Department of Science and Technology, Ministry of Science of Technology, Digital India, Power of Empower, Act as a Principal Investigator (PI)**

### **NATIONAL AND INTERNATIONAL WEBINARS**

- **Actively attended and participated the Webinar on the topic “AIT's Capacity-Building PhD Program” on 22<sup>nd</sup> December, 2020 Presented by Prof. Shawn Kelly, Director, Office of International Affairs Asian Institute of Technology, Thailand.**
- **Actively attended and participated the Webinar on the topic “Color Encoding in Convolutional Neural Networks” on 15<sup>th</sup> October, 2020 Presented by Prof. Maria Vanrell, Ph. D., Professor, General Chair, CVC - Universitat Autònoma de Barcelona (Spain), Sponsored by Color Imaging and Science - Society for Imaging Science and Technology (IS and T).**
- **Actively attended and participated the Webinar on the topic “Additive Color in Displays and Lighting Systems” on 15<sup>th</sup> October, 2020 Presented by Prof. Michael**

**Murdoch, Ph. D., Assistant Professor, Color Science Program, College of Science, Rochester Institute of Technology, Rochester, New York, Sponsored by Color Imaging and Science - Society for Imaging Science and Technology (IS and T).**

- **Actively attended and participated the Webinar on the topic “Color Perception and Color Appearance Modeling” on 15<sup>th</sup> October, 2020 Presented by Prof. Ming Ronnier Luo., Ph. D., Professor, College of Optical Science and Engineering Zhejiang University, China, Sponsored by Color Imaging and Science - Society for Imaging Science and Technology (IS and T).**
- **Actively attended and participated the Webinar on the topic “Measuring Color Metrology and Color Management” on 8<sup>th</sup> October, 2020 Presented by Prof. Phil Green., Ph. D., Professor of Norwegian University of Science and Technology (NTNU), Norway, Sponsored by Color Imaging and Science - Society for Imaging Science and Technology (IS and T).**
- **Actively attended and participated the Webinar on the topic “Measuring, Modeling and Visualization Surface Appearance” on 1<sup>st</sup> October, 2020 Presented by Prof. James A. Ferwerda., Ph. D., Associate Professor, Cornell University and Snehal A. Padhye (Ph. D.), Sponsored by Color Imaging and Science - Society for Imaging Science and Technology (IS and T).**
- **Actively attended and participated the Webinar on the topic “MERGE – Improving Internationalization practices in Higher Education” on 16<sup>th</sup>, December, 2020 and Presented by Prof. G. Nagarajan, Director Centre for International Relations, Anna University, Chennai.**
- **Actively attended and participated the Webinar on the topic “Urban Vulnerabilities in Cambodia” on Tuesday, 17<sup>th</sup>, November, 2020 and organized by The Center for Khmer Studies (CKS) and The Asia Foundation.org and share with “Limits to Growth: A Vulnerability Approach to Understanding Urbanization in Cambodia” contributed by Adam Saltsman, Speaker: Adam Saltsman is Assistant Professor in the Department of Urban Studies and Director of the Urban Action Institute at Worcester State University in Massachusetts.**
- **Actively attended and participated the Webinar on the topic “Modelling of Biomedical Applications Using Neural Networks In International Short Term Training Program Held In India” Organized by United Innovators - IFERP on 16<sup>th</sup> , September, 2020.**
- **Actively attended and participated the Webinar on the topic “AI getting used in impact of Covid – 19 Era” Organized by United Innovators - IFERP on 14<sup>th</sup>, June, 2020.**
- **Actively attended and participated the Webinar on the topic “Research Article Writing and Publishing in Good Impact Journal” Organized by United Innovators - IFERP on 13<sup>th</sup>, June, 2020.**

- Actively attended and participated the Webinar on the topic “**Data & Machine Learning Part III**” **Organized by Google Cloud Platform on 12<sup>th</sup>, June, 2020.**
- Actively attended and participated the Webinar on the topic “**Jobs & COVID-19**” **Organized by Times Jobs on 11<sup>th</sup>, June, 2020.**
- Actively attended and participated the Webinar on the topic “**Data & Machine Learning Part II**” **Organized by Google Cloud Platform on 10<sup>th</sup>, June, 2020.**
- Actively attended and participated the Webinar on the topic “**Data & Machine Learning Part I**” **Organized by Google Cloud Platform on 8<sup>th</sup>, June, 2020.**
- Actively attended and participated the Webinar on the topic “**Virtual Interactive Classroom for Teachers and the Challenging Technologies in Post Covid – 19 Era**” **Organized by United Innovators - IFERP on 05<sup>th</sup>, June, 2020.**
- Actively attended and participated the Webinar on the topic “**Knowledge Sharing on A to Z of Journal Publications (Survey to Citations!!)**” **Organized by United Innovators - IFERP on 30<sup>th</sup>, May, 2020.**

#### **NATIONAL AND INTERNATIONAL SEMINARS**

- Participated in the One day seminar entitled “**LEAN SIX SIGMA**” at Ministry of Micro, Small & Medium Enterprises (**Government of India**) **MSME DEVELOPMENT INSTITUTE Guindy Industrial Estate, Chennai, Tamil Nadu, India – 600 032.**
- Participated in the One day seminar entitled “**YUVA SAKTHI**” at **Meenakshi College of Engineering, Presented by Ramakrishna Madam, Chennai, Tamil Nadu, India – 600 078.**
- Participated in the One day seminar entitled “**Process Control Instrumentation**” at **Meenakshi College of Engineering, Presented by Government of India, National Skill Training Institute (NSTI), CTI Campus, Guindy Industrial Estate, Chennai, Tamil Nadu, India - 600 032.**
- Participated in the One day seminar entitled “**Process Control and Instrumentation**” at **Meenakshi College of Engineering, Presented by Government of India, CPCL, Chennai, Tamil Nadu, India - 600 032.**

#### **NATIONAL AND INTERNATIONAL CERTIFICATE OF PARTICIPATION**

- Participated in the Quiz on entitled “**FREEDOM STRUGGLE**” in Ministry of Defence, Government of India, New Delhi.
- Participated in the Quiz on entitled “**UMANG and MY GOV**” in Ministry of Electronics and Information Technology, Government of India, New Delhi.

## **NATIONAL AND INTERNATIONAL WORKSHOPS**

- Participated in the workshop entitled “**Design trends in Deep Submicron CMOS VLSI and EDA Tools**” at Anna University Coimbatore, Tamil Nadu, India in 2009.
- Participated in the workshop entitled “**Mentor Graphics Based VLSI Design Flow**” at Anna University Coimbatore, Coimbatore, And Tamil Nadu, India Dated 24<sup>th</sup> April 2010.
- Participated in the workshop entitled “**Embedded RTOS and Wireless Sensor Networks**” at Anna University Coimbatore, Tamil Nadu, India. Dated 10<sup>th</sup> and 11<sup>th</sup> April 2009.
- Participated in the workshop entitled “**Outcome Based Education System and Values of NBA at Meenakshi College of Engineering, West K. K. Nagar, Chennai Tamil Nadu, India. Dated 20<sup>th</sup> to 21 June 2016.**
- Participated in the workshop entitled “**Research Methodology at Meenakshi College of Engineering, West K. K. Nagar, Chennai, And Tamil Nadu, India. Dated 21<sup>th</sup> to 22 December 2016.**
- Participated in the workshop entitled “**Internet of Things (IOT)**” at Meenakshi College of Engineering, West K. K. Nagar, Chennai and Tamil Nadu, India.
- Participated in the workshop entitled “**PLC & SCADA**” conducted by ZENMAQ Industrial Automation solutions Pvt. Ltd at Meenakshi College of Engineering, Department of EIE, Transducer Laboratory, Chennai, West K. K. Nagar, Tamil Nadu, India.
- Participated in the workshop entitled “**Bio-Inspired Optimization Techniques in Engineering Research at Meenakshi College of Engineering, West K. K. Nagar, Chennai, And Tamil Nadu, India. Dated 07<sup>th</sup> to 8 March 2019.**
- Actively Participated in the “**IET Sponsored Two days Workshop on DATA Science**” Conducted by Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai on The 17<sup>th</sup> and 18<sup>th</sup> December 2020.

## **NATIONAL AND INTERNATIONAL FACULTY DEVELOPMENT PROGRAMMES (FDP)**

- Participated in the Government of India and AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Programme (FDP) entitled “**Emerging Trends and Technologies in Renewable Energy for Sustainable Development**” at Prince Shri Venkateshwara Padmavathy Engineering College, Tamil Nadu, India. Dated 10<sup>th</sup> to 15<sup>th</sup> February 2025.
- Participated in the Government of India and AICTE FDP/Short Term Training Programme (STTP) / Workshop sponsored Faculty Development Programme

(FDP) entitled “Emerging Trends in Computing Technologies” at Sri Krishna College of Engineering & Technology, Tamil Nadu, India. Dated 05<sup>th</sup> to 10<sup>th</sup> February 2024.

- Participated in the Government of India and AICTE FDP/Short Term Training Programme (STTP) / Workshop sponsored Faculty Development Programme (FDP) entitled “Free Simulator for EC LAB” at NITTTR, Chennai, Tamil Nadu, India. Dated 26<sup>th</sup> to 30<sup>th</sup> September 2024.
- Participated in the Government of India and AICTE sponsored Faculty Development Programme (FDP) entitled “5G THEORY TO PRACTICE AND ITS APPLICATIONS” at Easwari Engineering College, Tamil Nadu, India. Dated 11<sup>th</sup> to 24<sup>th</sup> June 2019.
- Participated in the Faculty Development Programme (FDP) entitled “EC 6003 ROBOTICS AND AUTOMATION” at Misrimal Navajee Munoth (MNM) Jain Engineering College, Chennai. Dated 16<sup>th</sup> to 18<sup>th</sup> Nov 2016.

#### **NATIONAL AND INTERNATIONAL AWARDS**

- “ELLITE TEACHER AWARD” - 2017 for Outstanding contribution towards in the field of Education and Teaching Awarded by Meenakshi College of Engineering, West K. K. Nagar, Chennai, Tamil Nadu, India.
- “BEST TEACHER AWARD” - 2017 for Outstanding contribution towards in the field of Education and Teaching in the subject of Digital Signal Processing Awarded by Meenakshi College of Engineering, West K. K. Nagar, Chennai, Tamil Nadu, India.

#### **NATIONAL AND INTERNATIONAL CERTIFICATE OF APPRECIATION**

- “*CERTIFICATE OF APPRECIATION*” this is to certify that Dr. Yuvaraj Sundaram M.E., Ph. D., from Meenakshi College of Engineering has Delivered a KEYNOTE SPEECH on “Modelling of Biomedical Applications Using Neural Networks In International Short Term Training Program Held In India” at the Modelling of Biomedical Applications Using Neural Networks In International Short Term Training Program Held In India Organized by IFERP on 16<sup>th</sup> , September, 2020.

#### **NATIONAL AND INTERNATIONAL CONFERENCES**

- Participated and presented a paper entitled “The New Era of Cartography with Visual Analytics and Augmented Reality Transforming the Field of Digital Globes” at 2024 IEEE 4th International Conference on ICT in Business Industry and Government (ICTBIG 2024), IEEE, And Tamil Nadu, India. Dated December

2024.

DOI:

DOI: [10.1109/ICTBIG64922.2024.10911599](https://doi.org/10.1109/ICTBIG64922.2024.10911599)

- Participated and presented a paper entitled “A Hybrid TDOA-ANN Framework for Accurate Real-Time Node Localization in Wireless Sensor Network” at 2024 IEEE 2nd International Conference on Innovations in High Speed Communication and Signal Processing (IHCSP), E3S Web Conf. Volume 591, 2024 , IEEE, And Tamil Nadu, India. Dated December 2024. DOI: DOI: [10.1109/IHCSP63227.2024.10960072](https://doi.org/10.1109/IHCSP63227.2024.10960072)
- Participated and presented a paper entitled “Exploring Patterns and Evolving Paradigms Within Pristine Management Processes” at 2024 IEEE 2nd International Conference on Innovations in High Speed Communication and Signal Processing (IHCSP), E3S Web Conf. Volume 591, 2024 , IEEE, And Tamil Nadu, India. Dated December 2024. DOI: DOI: [10.1109/IHCSP63227.2024.10960052](https://doi.org/10.1109/IHCSP63227.2024.10960052)
- Participated and presented a paper entitled “Design and Optimization of Multilevel Inverters for Enhanced Power Quality in Renewable Energy Applications” at International Conference on Renewable Energy Resources and Applications (ICRERA-2024), E3S Web Conf. Volume 591, 2024 , IEEE, And Tamil Nadu, India. Dated October 2024. DOI: <https://doi.org/10.1051/e3sconf/202459101008>
- Participated and presented a paper entitled “An End-to-End Reconfiguration System-Friendly Vertical Handover Scheme” at 2024 Global Conference on Communications and Information Technologies, GCCIT 2024), IEEE, And Tamil Nadu, India. Dated October 2024. DOI: [10.1109/GCCIT63234.2024.10862379](https://doi.org/10.1109/GCCIT63234.2024.10862379)
- Participated and presented a paper entitled “Legal Framework for Energy Transition: Balancing Innovation and Regulation” at 1st International Conference on Power and Energy Systems (ICPES 2023), [E3S Web of Conferences](https://doi.org/10.1051/e3sconf/202454013015), And Tamil Nadu, India. Dated 24th June 2024. DOI: [10.1051/e3sconf/202454013015](https://doi.org/10.1051/e3sconf/202454013015)
- Participated and presented a paper entitled “AI Controlled wind turbine systems Integrating IOT and Machine Learning for Smart Grids” at 1st International Conference on Power and Energy Systems (ICPES 2023), EDP Sciences, And Tamil Nadu, India. Dated June 2024. <https://doi.org/10.1051/e3sconf/202454003008>
- Participated and presented a paper entitled “Advances and Challenges in Color and Multispectral Image Retrospective Analysis” at 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024) IEEE, And Tamil Nadu, India. Dated June 2024. DOI: 10.1109/ICCCNT61001.2024.10724668

- Participated and presented a paper entitled “Leveraging AI to Unlock the Potential of Data Science.” at 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024) IEEE, And Tamil Nadu, India. Dated June 2024. DOI: [1109/ICCCNT61001.2024.10725526](https://doi.org/10.1109/ICCCNT61001.2024.10725526)
- Participated and presented a paper entitled “Measuring Subjective Image Quality using Machine Learning Techniques” at 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024) IEEE, And Tamil Nadu, India. Dated June 2024. DOI: [10.1109/ICCCNT61001.2024.10723330](https://doi.org/10.1109/ICCCNT61001.2024.10723330)
- Participated in International Conference paper entitled “Joint radio Frequency and optical Spectral Optimization for High-Speed Wide Area Fiber Optic Communications” at 2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON 2023), IEEE. Year of Publications, December 2023. DOI: [10.1109/SMARTGENCON60755.2023.10442045](https://doi.org/10.1109/SMARTGENCON60755.2023.10442045)
- Participated in International Conference paper entitled “State-of-the-Art Applications of Deep Neural Networks for Time Series Analysis” at 2023 International Conference on Emerging Research in Computational Science (ICERCS 2023), IEEE. Year of Publications, December 2023. DOI: [10.1109/ICERCS57948.2023.10434079](https://doi.org/10.1109/ICERCS57948.2023.10434079)
- Participated in International Conference paper entitled “Investigating and Implementing the Efficiency of Image Restoration Techniques in Digital Image Processing” at 2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON 2023), IEEE. Year of Publications, December 2023. DOI: [10.1109/SMARTGENCON60755.2023.10442169](https://doi.org/10.1109/SMARTGENCON60755.2023.10442169)
- Participated in International Conference paper entitled “Investigating the Potential for Using AI to Improve the Performance of Big Data Access” at 2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON 2023), IEEE. Year of Publications, December 2023. DOI: [10.1109/SMARTGENCON60755.2023.10442655](https://doi.org/10.1109/SMARTGENCON60755.2023.10442655)
- Participated in International Conference paper entitled “Performance Analysis of SRAM and Dram in Low Power Application” at 2023 International Conference on Networking, Electrical Engineering, Computer Science, and Technology (ICONNECT-2023), EDP Sciences. Year of Publications, July 2023. <https://doi.org/10.1051/e3sconf/202339901014>
- Participated in International Conference paper entitled “Estimation of Bandwidth Requirement for Underwater Fiber Optic Networks” at 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative

Applications in Global Scenario (ICPSITIAGS 2023), IEEE. Year of Publications May 2024. DOI: [10.1109/ICPSITIAGS59213.2023.10527682](https://doi.org/10.1109/ICPSITIAGS59213.2023.10527682)

- Participated in International Conference paper entitled “An Analysis of Encapsulating Security Payload in Wireless Network Security” at 2023 International Conference on Emerging Research in Computational Science (ICERCS 2023), IEEE. Year of Publications, February 2024. DOI: [10.1109/ICERCS57948.2023.10433980](https://doi.org/10.1109/ICERCS57948.2023.10433980)
- Participated in International Conference paper entitled “Forecasting Web Page Popularity using Artificial Neural Networks” at 2023 4th International Conference on Computation, Automation and Knowledge Management (ICCAKM 2024), IEEE. Year of Publications, February 2024. DOI: [10.1109/ICCAKM58659.2023.10478541](https://doi.org/10.1109/ICCAKM58659.2023.10478541)
- Participated in International Conference paper entitled “An Evaluation and Implementation of Pretty Good Privacy (PGP) in Wireless Network Security” at 2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON 2023), IEEE. Year of Publications, February 2024. DOI: [10.1109/SMARTGENCON60755.2023.10442708](https://doi.org/10.1109/SMARTGENCON60755.2023.10442708)
- 
- Participated and presented a paper entitled “Dynamic Power Minimization in Programmable FPGA Routing Circuitry” at IETE Conference, NCICC 2010, and SNS College of Technology, Coimbatore, And Tamil Nadu, India. Dated 5<sup>th</sup> Mach 2010.
- Participated and presented a paper entitled “Low Power High Performance Flip-flop for Level Conversion in Dual Supply System” National Conference VCC – 2010 at Sengunthar Engineering College, Tiruchengode, Erode, Tamil Nadu, India. Dated 23<sup>rd</sup> April 2010.
- Participated and presented a paper entitled “Modified Clocked Pseudo - NMOS Flip Flop for Level conversion in CVS systems” CSIR sponsored IEEE Conference Madras Section, NCSCV 2010 at Anna University Coimbatore, Chennai, Tamil Nadu, India. Dated 7<sup>th</sup> and 8<sup>th</sup> May 2010.

#### ***PUBLISHED NATIONAL AND INTERNATIONAL JOURNALS***

- Yuvaraj, S; Seshasayanan, R; Kunaraj, K, “Satellite Image Resolution Enhancement Using Evolved Wavelet Filters”, Journal of Computational and Theoretical Nanoscience, Vol.14. no.09, pp. 4326-4339, Sep. 2017. DOI: <https://doi.org/10.1166/jctn.2017.6740> (Annexure - I, Scopus Indexed)

- Dr. S. Yuvaraj, Dr. K.K. Senthilkumar, Dr. R. Seshasayanan, “High-performance Wallace Tree Multiplier”, International Journal of Computer Techniques, (IJCT), vol. 07, Issue no.01, pp. 01-08. Feb. 2020. (Web of Science), DOI: 10.29126/23942231/IJCT-V7I1P3 (UGC care Journal List).
- Dr. S. Yuvaraj, Dr. K.K. Senthilkumar, Dr. R. Seshasayanan, “Wavelet Based Various Interpolation Techniques for High Resolution Image Enhancement Processing”, International Journal of Engineering and Techniques, (IJET), vol. 06, Issue no.03, pp.01-08. Jun. 2020. (Web of Science), DOI: 10.29126/23951303/IJET-V6I3P11. (UGC care Journal List).
- Dr. S. Yuvaraj, Dr. R. Seshasayanan, Dr. A. Maniannamalai, “High performance PID controller for pressure process station” Journal of Emerging Technologies and Innovative Research, (JETIR), vol. 07, Issue no. 08, pp. 25-35. Sep. 2020. ISSN: 2349 - 5162.  
DOI: <http://doi.one/10.1729/Journal.24383>. (UGC care Journal List-63975).
- Dr. S. Yuvaraj, Dr. R. Seshasayanan, Dr. K.K. Senthilkumar, Prof. G. Venkatesan, “Satellite Image Resolution Enhancement using Discrete Wavelet Transform”, International Journal of Research and Analytical Reviews (IJRAR), vol. 7. No. 04, pp. 517-527. Oct 2020. E - ISSN 2348-1269, P- ISSN 2349-5138. <http://doi.one/10.1729/Journal.24707>. (UGC care Journal List-43602(19)).
- Dr. S. Yuvaraj., M.E., Ph. D., Dr. R. Seshasayanan., M.E., Ph.D., Dr. K. K. Senthil Kumar., M.E., Ph. D., Dr. K. Kunaraj., M.E., Ph. D., Prof. G. Venkatesan., B.E, M.S, (Ph. D), "SATELLITE IMAGE RESOLUTION ENHANCEMENT USING DWT-SWT ", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320 - 2882, Volume.8, Issue 10, pp.1693-1701, October 2020, Available at :<http://www.ijcrt.org/papers/IJCRT2010225.pdf> (UGC care Journal List - [49023](#)).

- **Dr. S. Yuvaraj, Prof. G. Venkatesan, K. K. Manivannan, P. Sudha Asir, Dr. G. Brindha, R. Anandkumar, "High Performance Ripple Carry Adders For VLSI Design", International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455 - 6211, Volume 10, Issue 4, April-2022, pp.2545-2552. (UGC care Journal List) (Web of Science Researcher ID C-7388-2017).**
- **Dr. S. Yuvaraj, Ph. D, Dr. K.K. Senthilkumar, Ph. D, Dr. K. Senthamil Selvan, Ph. D., A.R. Aravind., M.E., " HIGH PERFORMANCE RIPPLE CARRY ADDERS IN VLSI DESIGN", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320 - 2882, Volume.10, Issue 6, pp.545 - 552, June 2022, Available at :<http://www.ijcrt.org/papers/IJCRT2010225.pdf> (UGC care Journal List -49023).**
- **Dr. S. Yuvaraj, Ph. D, Dr. K.K. Senthilkumar, Ph. D, Dr. K. Senthamil Selvan, Ph. D., A.R. Aravind., M. E., " HIGH PERFORMANCE RIPPLE CARRY ADDERS", Journal of Emerging Technologies and Innovative Research, (JETIR), vol. 09, Issue no. 06, pp. 453 - 458. June. 2022. ISSN: 2349 - 5162. [www.jetir.org/papers/JETIR2206254.pdf](http://www.jetir.org/papers/JETIR2206254.pdf). (UGC care Journal List-63975).**
- **Yuvaraj, S; Murali, MJ; Aravind, AR.. "HIGH PERFORMANCE RCA FOR VLSI DESIGN." SCIREA Journal of Education, Vol. 8, no. 03, June, 2023.**
- **Dr.S.Yuvaraj,Ph.D.,Dr.S.Ramamoorthy.,Ph.D.,Dr.K.K.Senthilkumar.,Ph.D,Dr .K.Senthamilselvan., Ph. D., Dr. A. R. Aravind, Ph. D., "HIGH PERFORMANCE 128 – BIT RIPPLE CARRY ADDER FOR VLSI DESIGN", IJETIR, vol. 11, (03), 128-135.April. 2024. ISSN: 2349 - 5162.**
- **Dr. S. Yuvaraj Dr. K.K. Senthil Kumar, Dr. S. Ramamurthy, Dr. K. Senthamilselvan, Mr. M. J. Murali, (Ph. D)., Dr. A. R. Aravind, Ph. D., "MEDICAL IMAGE RESOLUTION USING SPATIAL FREQUENCY MEAN**

VALUE” , IJRAR, Vol. 11, Issue. 02. April. 2024. E - ISSN 2348-1269, P- ISSN 2349-5138.

- 1Dr.S.Yuvaraj, Ph. D.,(Corresponding Authors),2Dr.K. K. Senthilkumar.,Ph. D, 3Dr.K.Senthamilselvan., Ph.D.,4Dr. V. Ashok, Ph. D., 5Dr.A.R.Aravind, Ph.D.,, “High Performance 128 Bit Ripple Carry Adder To Vlsi Design” , International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.13, Issue 6, pp. 365 - 374, June 2025, Available at :<http://www.ijcrt.org/papers/IJCRT2506388.pdf> (UGC care Journal List - 49023).
- Dr. K. K. Senthilkumar, Ph. D., 2Dr. S. Yuvaraj, Ph.D(Corresponding Author), Ph. D,3Mr. M. J. Moorali., M. E.,4Dr. V. Ashok, Ph. D.,5Dr. A. R. Aravind, Ph. D., “EFFICIENT RIPPLE CARRY ADDER FOR VLSI DESIGN”, IJETIR, vol. 12, (06), 322 – 332. June. 2025. ISSN: 2349 - 5162. <http://www.jetir.org/papers/JETIR2506248.pdf> (UGC care Journal List - 49023).

#### **UNDER REVIEW INTERNATIONAL JOURNAL**

1. Journal of Medical Imaging and Health Informatics ([Annexure - I](#))

**Title:** “Biomedical Image Resolution Enhancement Using Evolved Wavelet Filters” Authors: Yuvaraj, S<sup>1</sup>; Seshasayanan, R<sup>2</sup>; Senthil kumar, K..K<sup>3</sup>

ISSN: 2156-7018 (Print): EISSN: 2156-7026 (Online)

Publisher: American Scientific Publishers

#### **PEER REVIEWER / EDITOR IN NATIONAL AND INTERNATIONAL JOURNALS / CONFERENCES**

- AUSTALASIAN PHYSICAL AND ENGINEERING SCIENCES IN MEDICINE, SPRINGER NATURE (APES) (ANNEXURE – 1) (EISSN: 26624737, PISSN : 26624729)
- JOURNAL OF ENGINEERING RESEARCH AND REPORTS (ISSN: 25822926), UK. SEMANTIC SCHOLAR, CITeseerX INDEXED
- ADVANCES IN SCIENCE, TECHNOLOGY AND ENGINEERING SYSTEMS JOURNAL (ASTESJ) (ISSN: 24156698) (SCOPUS INDEXED)
- PEER REVIEWER, UNIVERSITY OF SOUTH FLORIDA, TAYLOR AND FRANCIS ONLINE, UNITED KINGDOM (USA).
- Journal of Emerging Technologies and Innovative Research (UGC Journal List)
- Publons
- SCIENCE DOMAIN INTERNATIONAL Journal (Editor)
- Global Journals (ANNEXURE – 1)

- **Advances in Information Technologies for Hospitality and Tourism (AITHT). USA. TAYLOR AND FRANCIS ONLINE, UNITED KINGDOM (UK).**
- **Hospitality and Tourism Information Technology Textbook (HTITT), USA. TAYLOR AND FRANCIS ONLINE, UNITED KINGDOM (UK).**
- **Current Research Journal of Social Sciences and Humanities (CRJSSH), ISSN: 2581-8422, Harvard Library, London.**
- **Current World Environment, An International Research Journal of Environmental Science (IRJES), and ISSN: 0973-4929, Online ISSN: 2320-8031, University of Curtin, Australia.**

### **GOVERNMENT FUNDED PROJECTS**

- **Applied to the Title of the Project: “SELF EMPOWERING AND SUSTAINED IRRIGATION SYSTEM WITH UPDATES” in Government of Tamil Nadu, Department of Higher Education, Tamil Nadu state council for Science and Technology, DOTE campus, Chennai, Tamil Nadu, India – 600 025 in for the Academic year of 2013- 2014 batch.**
- **Applied for the Title of the Project: “AN INNOVATIVE HYBRID SOLAR ENERGY BICYCLE” in Government of Tamil Nadu, Department of Higher Education, Tamil Nadu state council for Science and Technology, DOTE campus, Chennai, Tamil Nadu, India – 600 025 in for the Academic year of 2019- 2020 batch.**

### **NATIONAL AND INTERNATIONAL WEBINAR / SESSION / LECTURE DELIVERED**

1. **“COVID-19” changed the way we teach and transfer knowledge to others. Many universities around the world switched to fully or partial online education model. As part of these efforts, many universities and organizations offered online sessions, webinars or lectures. Many of these sessions were recorded. University of South Florida, M3 Center, Tampa, FL 33620, USA presents this database for these recorded sessions with hopes to help other educators and Researchers from around the world.**

Sl. No.	Title of the Video	Speakers	Cover Photo	Date Published	Summary of the webinars	Category	URL of the Video
1	THE IMPACT OF COVID19 ON HIGHER EDUCATION AROUND THE WORLD	<p>1. Dr. Yuvaraj Sundaram, M.E., Ph. D., (Associate Professor)</p> <p>2. Dr. R. Seshasayanan. M.E., Ph. D., (Professor), Department of ECE,</p> <p>Meenakshi College of Engineering</p> <p>3. Dr. K. K.</p>	<p>THE IMPACT OF COVID-19 ON HIGHER EDUCATION AROUND THE WORLD</p>  <p>Organized by University of South Florida, M3 Center, Tampa,</p>	02.09.2020	<p>1. The IAU Global Survey on the impact of COVID19 on Higher Education is a research project that was conceived and executed by the International Association of Universities (IAU) in a relatively short time.</p> <p>2. The</p>	Innovation & IT	<a href="https://mce.edu.in/">https://mce.edu.in/</a>

		Senthil Kumar, M.E., Ph.D., (Associate Professor)  Department of ECE,  Prince Shri Venkateshwara Padmavathy Engineering College	FL 33620 United states of America		realization of the present report has been possible only thanks to the contribution of a large number of individuals and organizations from around the world.		
2	<b>Modelling of Biomedical Applications Using Neural Networks</b>	1. Dr. Yuvaraj Sundaram, M.E., Ph. D., (Associate Professor.)  Department of Electronics and Instrumentation Engineering,  Meenakshi College of Engineering		16.09.2020	1. To understand the basic ideas and principles of Neural Networks  2. To understand the basic concepts of Big Data and Statistical Data Analysis  3. To appreciate the use of Deep Learning Applications	Innovation & IT	<a href="https://www.youtube.com/watch?v=5ZiIS8nUO2c&amp;t=797s">https://www.youtube.com/watch?v=5ZiIS8nUO2c&amp;t=797s</a>

2. Dr. Yuvaraj Sundaram M.E., Ph. D., from Meenakshi College of Engineering has delivered a **KEYNOTE SPEECH** on “*Modelling of Biomedical Applications Using Neural Networks In International Short Term Training Program Held In India*” Organized by World Conferences on Applied Science Engineering and Technology (WCASET), Malaysia, Indonesia, University of Malaysia (UOM) Kuala Lumpur, Asia and Pacific University (APU), AJMAN University, ISABELA STATE University (ISS) Philippines, WCC, Philippines, GALGOTIAS University, SRM University and AMITY University, United Innovators - IFERP on 16<sup>th</sup>, September, 2020. It presents this database for these recorded sessions with hopes to help other educators and Researchers from around the world.

### **NATIONAL and INTERNATIONAL JOURNALS CERIFICATE OF PEER REVIEWER and EDITOR**

SL. No	Journals	Review Date	Manuscript ID	Title
1	Australasian Physical & Engineering Sciences in Medicine (APESM), Springer Nature (EISSN-2662-4737) (PISSN - 2662-4729), Australasia (Annexure – I )Journals list in Anna University Chennai	11.11.2019	APES-D-19-00340R1	Effective structures of electrodes for optimal tDCS in the study of stroke patients
2	JERR (ISSN: 2582-2926), Mendeley, UK	27.06.2020	Ms_JERR_58701	Bond Line Thickness Characterization for QFN Package Robustness
3	JERR (ISSN: 2582-2926),	18.08.2020	Ms_JERR_60368	Semiconductor Package Design Solution for Addressing High-Density

	Mendeley, UK			Configuration
4	(ASTESJ) (ISSN: 2415-6698) Scopus Indexed, USA	02.10.2020	20M-09-748	Development and Performance Analysis of HRPL Using 6LoWPAN CC2538 Module for IoT Ecosystem of Special Issue, Published
5	(ASTESJ) (ISSN: 2415-6698) Scopus Indexed, USA	01.10.2020	20M-09-695	VLSI Architecture for OMP to Reconstruct Compressive Sensing Image
6	(IJMPCR) (ISSN: 2394-109X) HINARI (United Nation's Database)	24.11.2020	Ms_IJMPCR_63538	Light emitting diode (LED) bulb aspiration in Northern Ghana: A case report and literature review published by 13(2): 26-29, 2020; Article no.IJMPCR.63538, ISSN: 2394-109X, NLM ID: 101648033
7	AJPAS (ISSN: 2582-0230), CiteSeerX, UK	22.12.2020	Ms_AJPAS_64209	Application supersaturated design to study the spread of electronic games in Saudi society
8	(ASTESJ) (ISSN: 2415-6698) Scopus Indexed, USA	21.01.2021	20M-12-1346	Coronal Spinal Postural Alignment Screening Tool Using Markerless Digital Photography
9				
10				

***NATIONAL and INTERNATIONAL BOOKS CHAPTER OF PEER REVIEWER and EDITOR***

SL. No	Books	Manuscript ID	Chapters
1	<b>HOSPITALITY AND TOURISM INFORMATION TECHNOLOGY TEXTBOOK”, PUBLISHED BY TAYLOR AND FRANCIS ONLINE, UNITED KINGDOM (UK).</b>	<b>HTIT-10-2020- 209.V1</b>	<b>DIGITAL MARKETING IN TOURISM AND HOSPITALITY INDUSTRY</b>
2			

***DOCTOR OF PHILOSOPHY***

***TOPIC: “IMAGE ENHANCEMENT ALGORITHMS FOR LOW RESOLUTION IMAGES  
USING EVOLVED WAVELET FILTERS”***

**Description:** In this research methodology is basically on an image resolution enhancement algorithm based on evolved wavelet filter coefficients is proposed. The main focus of this paper lies in the optimization of wavelet filters using Genetic Algorithms based on parameters related to edges in the image.

## **PG PROJECT**

### **“Modified clocked Pseudo NMOS flip flop for level conversion in dual supply systems”**

**Description** : It is a low power circuit design which uses level converter for voltage discrimination in the chip and hence providing Optimal voltage distribution.

**Design tool** : **Micro wind EDA tool**

**Simulation tool** : **Dsch3**

## **UG PROJECT**

### **Embedded Based on Centralized Announcing System**

**Description** : It is based on wireless communication system, which allows data to be transferred from a central place either in the form of voice Speaker or visual LED or Video form.

**Front end** : **My SQL Server**

**Back end** : **J2SE**

## **SPORTS ACHIEVEMENTS**

- Participated in 4 × 400 Relay (men) and Secured Third position in the Anna University Coimbatore Zonal Athletic Meet for the Academic year 2009 - 2010, held at Government College of Technology, Coimbatore, Tamil Nadu, India.

## **NATIONAL AND INTERNATIONAL INDUSTRIAL TRAININGS FDP**

- Participated an Industrial Training programmes a entitled “Empowering Industry 4.0 with Artificial Intelligence” organized by the IET Chennai, Tamil Nadu, India, IETCLN-1-2020-0770, Dated 15<sup>th</sup> - 21<sup>st</sup> July 2020.
- Participated and attended the virtual Industry Visit Nokia Solutions and Networks India Pvt. Ltd, and successfully completed their one day Industrial Training programmes facilitated by ARIOT, Chennai, And Tamil Nadu, India. Dated 17<sup>th</sup> July 2020.

## **GATE EXAMINATION ACHIEVEMENTS**

- Performance on GATE 2010 is scored 225 (Registration No.: EC 7079110). Examination Paper: EC – Electronics and Communication Engineering.

## **PERSONAL PROFILE**

Father’s Name : **A.K. Sundaram (Late)**

Spouse Name : **E. K. Gomathy**

Date of Birth : **03-06-1986**

Permanent Address : **New No: 35, Old No: 2A, Rayan Kuttai street,  
Kancheepuram - 631 502.**

Present Address : **New No: 59 Old No: 41, Vellalar street,  
Kodambakkam - 600 024.**

Gender : **Male**

Nationality : **Indian**

Languages known : Tamil, English, Telugu, Malayalam  
Marital Status : Married  
Child : Y. G. Narmadha (Female)

## **REFERENCES**

**Dr. R. SESHASAYANAN, .M. E, Ph. D.,**  
**Professor, (Rt d.)**  
**Department of Electronics and Communication Engineering,**  
**College of Engineering Guindy, Anna University Main Campus,**  
**Chennai, Tamil Nadu, India - 600 025.**  
**Email id: seshasayanan@annauniv.edu**  
**Mobile no: 9444123528, +91 9080387901**

**Prof. A. MANI ANNAMALAI, B. Sc. (Phys.), DMIT (Instrumentation),**  
**Former GENERAL MANAGER, INTERNATIONAL POLYMERS CORPORATION,**  
**Ambattur Industrial Estate, Chennai, Tamil Nadu, India – 600 037.**  
**Email id: maniannamalai48@gmail.com**  
**Mobile no: +91 9566193538, 9487910881**

**Prof. G. VENKATESAN, B.E., MS (by Research), (Ph. D),**  
**Head of the Department, Associate Professor,**  
**Department of Electronics and Instrumentation**  
**Engineering, Meenakshi College of Engineering,**  
**Chennai, Tamil Nadu, India - 600 078.**  
**Email id: mceeiehod@gmail.com**  
**Mobile no: 9094793312, +91 7385840274**

## **DECLARATION**

I hereby declare that the above specified details are true to the best of my knowledge.

Place : CHENNAI  
Date : 14.06.2022

  
(Dr. S. YUVARAJ)