

## CURRICULAM VITAE

### J. ARPUTHA VIJAYA SELVI

NO.99, Bank Staff Colony,  
4<sup>th</sup> Cross, Madhakottai Road,  
Thanjavur – 613 005.

Tamil nadu.

Phone: 04362- 232451

Mobile: 9894726897

E-mail: vijayas\_02@yahoo.co.in, arputha09@gmail.com



### I. EDUCATIONAL QUALIFICATIONS

<i>University / College/ School attended</i>	<i>Degree awarded</i>	<i>Year of passing</i>	<i>Subjects of study</i>	<i>Class / Division</i>
National Institute of Technology, Tiruchirappalli – 620 015. Tamil Nadu.	Ph.D.	November 2006	-----	-----
National Institute of Technology, Tiruchirappalli – 620 015. Tamil Nadu.	M.E.	December 1997	Communication Systems	<b>I class</b>
St.Xavier's College, Tirunelveli – 627 002.	P.G.D.M.C.H.	April 1994	Microprocessor and Computer Hardware	<b>I class</b>
Manonmaniam Sundaranar University, Tirunelveli – 627 002.	P.G.D.C.A.	April 1992	Computer Applications	<b>I class</b>
Govt. college of Engineering, Tirunelveli – 627 007.	B.E.	April 1991	Electronics and Communication Engineering	<b>I class</b>
Sarah Tucker Hr. Sec. School, Palayamkottai – 627 002.	H.S.C.	April 1987	Maths, Physics, Chemistry, Biology	<b>1075/1200</b>
St. Ignatius convent Hr. Sec. School, Palayamkottai – 627 002.	S.S.L.C.	April 1985	Tamil, English, Maths, Science, History and Geography	<b>425/500</b>

## II. RESEARCH

**Title: Online conductivity control and estimation of controller parameters for processes with transportation lag**

**Research Guide:**

Dr.S.Sundaram, M.E., Ph.D.,  
Prof.& Head,  
Dept. of Chemical Engineering,  
National Institute of Technology,  
Tiruchirappalli – 620 015.

**Co-Guide:**

Dr.T.K.Radhakrishnan, M.E., Ph.D.,  
Asst.Professor,  
Dept. of Chemical Engineering,  
National Institute of Technology,  
Tiruchirappalli – 620 015.

**Duration: June 2004 – November 2006 (Full Time)**

**Course work:**

1. Advanced Process Control
2. Distillation Control
3. Chemical Process Systems
4. Process Dynamics and Control

**Papers published:**

**A. Refereed Journals**

**International**

1. Vijaya Karthik Swaminathan Vijayakumar and Arputha Vijaya Selvi James, NDN Content Poisoning Mitigation Using Bird Swarm Optimization and Trust Value, Intelligent Automation & Soft Computing, (2023).
2. Pasupathi, T and ArputhaVijayaSelvi, J. Real time experimental investigation of adaptive optics compensation technique for free space optical communication, Photonic Network Communication, (2022).
3. Vijaya Karthik Swaminathan Vijayakumar and Arputha Vijaya Selvi James, Hybrid Cluster Made Content Forwarding and Light Weight Sign Encryption IoT Based Named Data Network Using African Buffalo Optimization Algorithm, Journal of Intelligent & Fuzzy Systems, (2022)
4. Panneerselvam Rajasekar, James Arputha Vijaya Selvi, Sensing and Analysis of Greenhouse gas emissions from rice fields to near field atmosphere, Sensors, (2021)
5. Pasupathi, T., Arputha Vijaya Selvi, J. Experimental Study and Analysis of Meteorological and Wavefront Profile for Terrestrial Free Space Optical Communication Link at Lat.10.66° and Long.79.05°. Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. (2021).
6. T. Pasupathi and ArputhaVijayaSelvi, J, Design, Testing and Performance

- Evaluation of Beam Positioning System for Free Space Optical Communication System, *Radio Engineering*, Vol. 30, No. 1, April 2021, pp. 16-24.
7. B. Priya and J. Arputha Vijaya Selvi, Soft Switching Controller using Dynamic Rule Subsets for Multiphase -Multilevel Inverter Applications, *Journal of Electrical Engineering*, Vol. 20, Ed.1, 225-233, 2020.
  8. S. Manisekar and J. A.V. Selvi, Channel Scheduling Based on Orchestrator Live Node-Wavelength Reservation for Optical Burst Switching Networks, *Current Signal Transduction Therapy*, 15: 34, 2020.
  9. S. Manisekar and J. A.V. Selvi, An Enhanced Proactive Transmission Protocol for Optical Burst Switching Networks, *Applied Mathematics & Information Sciences*, Volume 13, No. 1, 87-96, 2019.
  10. S. Manisekar and J. A.V. Selvi, Controller Dependent Dual Layer Architecture (CDLA) For Blocking Probability In Optical Burst Switching, *Journal of Electrical Engineering*, Vol. 18, Ed. 4, 552-561, 2018.
  11. Thiruchelvi, G and Arputha Vijaya Selvi, J, BATS: Real Time Service Orient Buffer Management for QoS Development in IP Networks, *Journal of Computational and Theoretical NanoScience*, Vol. 14, No. 11, 5401-5406, 2017.
  12. S.G. Susila, J. Arputhavijayasselvi, Innovative energy resourceful merged layer technique (MLT) of node deployment to enhance the lifetime of wireless sensor networks, *Egyptian Informatics Journal*, vol.16, Iss.1, pp. 23-28, 2015. Scopus Indexed – Elsevier I.F.: 0.810.
  13. Bhavani sankar, A Madusudhanan, N, Arputha Vijaya Selvi, J, Removal of Noise through ANFIS filtering technique, *International Journal of Applied Engineering Research*, vol. 10, no.51, pp. 209-214, 2015. Scopus Indexed – RP Publication I.F.: 3.12
  14. Violet Juli V, Arputha Vijaya Selvi J, Mobility assisted redeployments in Wireless Sensor Networks – A study based on the density of Nodes, *Australian Journal of Basic and Applied Sciences*, vol. 9, Iss. 5, 268-280, 2014. Scopus Indexed - AENSI IF: 0.162.
  15. Arockia Bazil Raj, A, Arputha Vijaya Selvi, J, Kumar, D, Raghavan, S, 'Design of Cognitive Decision Making Controller for Autonomous Online Adaptive Beam Steering in Free Space Optical Communication System', *Wireless Personal Communications*, vol.84, Iss.1, pp.765-799, 2015. Thomson Indexed - Springer IF: 0.979.
  16. Jayasankar, T, Arputha Vijayaselvi, J, A Novel FPGA based low cost solution for Tamil - Text to Speech Synthesizer, *Research Journal of Applied Sciences, Engineering and Technology*, vol. 10, no.12, pp.1379-1383, 2015. Scopus Indexed – IF: 0.654.
  17. Arockia Bazil Raj A & Arputha Vijaya Selvi, J 'Comparison of Different Models for Ground-Level Atmospheric Attenuation Prediction with New Model According to Local Weather Data for FSO Applications', *Journal of Optical Communication*, vol.36, iss.2, pp. 181-196, 2014.

Scopus Indexed - de Gruyter IF: 0.336

18. Arockia Bazil Raj, A, Arputha Vijaya Selvi, J & Raghavan, S, Real-time Measurement of Meteorological Parameters for Estimating Low Altitude Atmospheric Turbulence Strength ( $C_n^2$ ), IET – Science, Measurement & Technology, vol.8, Iss.6, pp. 1-11, 2014.  
Thomson Indexed - IET IF: 1.00
19. Arockia Bazil Raj, A, Arputha Vijaya Selvi, J, Kumar, D & Sivakumaran, N, Mitigation of Beam Fluctuation due to Atmospheric Turbulence and Prediction of Control Quality using Intelligent Decision Making Tools, Applied optics, vol. 53, no. 17, pp. 3796-3806, 2014. Thomson Indexed - OSA IF: 1.689
20. Arockia Bazil Raj, A, Arputha Vijaya Selvi, J, Kumar, D & Raghavan, S, A Direct and Neural Controller Performance Study with Beam Wandering Mitigation Control in Free Space Optical Link, Optical Memory and Neural Networks (Information Optics), Vol. 23, Iss.3, pp.111-129, 2014. Scopus Indexed - Springer IF: 0.104
21. Arockia Bazil Raj, A, Arputha Vijaya Selvi, J, Kumar, D & Raghavan, S, Intensity feedback based beam wandering mitigation in Free Space Optical Communication using Neural Control Technique', EURASIP Journal on Wireless Communications and Networking, 160, pp.1-18. 2014. Thomson Indexed - Springer IF: 0.80.
22. Arockia Bazil Raj, A , Arputha Vijaya Selvi, J, Durairaj, S, Comparison of different models for ground-level turbulence strength ( $C_n^2$ ) prediction with new model according to local weather data for FSO applications, Applied Optics, vol.54, Iss.4, pp. 802-815, 2014. Thomson Indexed - OSA IF: 1.784.
23. Violet Juli, V & Arputha Vijaya Selvi, Voroni, Genetic Algorithms and their Tandem Application in Wireless Sensor Network Deployment, Research Journal Of Applied Sciences, Engineering & Technology, vol.8, Iss.4, pp.2426-2438, 2014. Scopus Indexed -  
RP Publication IF: 0.654.
24. T. Jayasankar and J.Arputha Vijayaselvi, FPGA-Based Implementation of Text Analyser and Syllable Preparation for Concatenative Speech Synthesis of Tamil Language, Australian Journal of Basic and Applied Sciences, vol. 8, Iss. 10, 102-109, 2014. Scopus Indexed - AENSI IF: 0.162.
25. Jayasankar, T, Arputha Vijayaselvi, J, Balaji Ganesh, A & Kumar, D, Word and Syllable Based Concatenative Model of Text to Speech Synthesis of Tamil Language, International Journal of Applied Engineering Research, vol. 9, no.24, pp. 23955-23966, 2014.  
Scopus Indexed – RP Publication I.F.: 3.12.
26. Malathy, M & Arputha Vijaya Selvi, J, 'Spoofed Iris Recognition: Synthesis of Gabor and LBP descriptor using SPPC', Australian Journal of Basic and Applied Sciences (ISSN 1991-8178), pp. 433-442, 2014.  
Scopus Indexed - AENSI IF: 0.162.
27. A Bhavani Sankar, J Arputha Vijaya Selvi, D Kumar , K Seetha Lakshmi, Effective enhancement of classification of respiratory states using feed

- forward back propagation neural networks, *Sadhana*, Vol. 38, Part 3, pp. 377–395, 2013. Thompson Indexed – IAS Academic Press IF: 0.476.
28. S.Suganthi, S.Raghavan and D.Kumar and J.Arputha Vijaya Selvi, Experimental Study on the Performance of Compact Hilbert Curve Fractal Antenna on Metamaterial using CSRR, *European Journal of Scientific Research (EJSR)*, Vol. 86, Iss.2, pp.243-253, 2012.  
Thompson Indexed – RP Publication IF 0.736.
  29. J. Arputha vijaya selvi, TK Radhakrishnan and S.Sundaram, "Performance assessment of PID and IMC tuning methods for a mixing process with time delay", *ISA Transactions*, Elsevier, 46,391-397, 2007.  
Thomson Indexed – Elsevier IF: 2.984.
  30. J. Arputha vijaya selvi, T.K. Radhakrishnan and S. Sundaram, "Model based IMC controller for processes with dead time", *Instrumentation Science and Technology*, Taylor & Francis Group, USA, 34, 463 - 474, 2006.  
Thompson Indexed IF: 0.539.
  31. Malathy, M & Arputha Vijaya Selvi, J, 'Synthesis Iris Recognition', *International Journal of Applied Engineering Research (IJAER)*, Accepted, Paper Code: 27556. Scopus Indexed – RP Publication I.F.: 3.12.

## **B. Non Refereed Journals**

### **National Journals**

1. J.Arputha vijaya selvi, T.K. Radhakrishnan and S.Sundaram, "Model based tuning of processes with transportation lag", *Instruments Society of India*, 36(1), 66 - 72, 2006.
2. Pasupathi, T, Arockia Bazil Raj, A, Arputhavijayasselvi, J ,FPGA Implementation of Adaptive Integrated Spiking Neural Network for Efficient Image Recognition System, *ICTACT Journal on Image and Video Processing*, vol.4, Iss.4, pp. 848-852, 2014.  
ICV: 6.23 Citation: 01
3. Malathy, M & Arputha Vijaya Selvi, J, Multimodal Biometric Decision Fusion for Liveness Authentication Authentication / Anti-Spoofing Engine, *Electronic Design and Signal Processing Narosa Publishing House Pvt. Ltd*, pp.195-201, 2012.

### **International Journals**

1. S.Suganthi, S.Raghavan and D.Kumar and J.Arputha Vijaya Selvi, Investigation of Novel CPW Fed Fractal Shaped Microstrip Slot Antennas, *International Journal of Advanced Scientific and Technical research (IJAST)*, Vol.5, Iss.2, pp.73-81, 2012  
Index Copernicus IF: 3.54.
2. S.Suganthi, S.Raghavan and D.Kumar and J.Arputha Vijaya Selvi, Design and Simulation of a Novel CPW Fed Hilbert Curve Shaped Microstrip Fractal Antenna, *International Journal of Emerging Trends in Engineering and Development (IJETED)*, Issue 2, Vol. 6, pp.395-401, 2012.  
I.F :3.22
3. Suganthi, S, Raghavan, S, Kumar, D, Arputha Vijaya Selvi, J, Study of

Compact Hilbert Curve Fractal Antennas for Implantable Medical Applications, International Journal of Emerging Technology and Advanced Engineering, vol.2, iss.10, pp.116-125, 2012.

I.F: 2.324

4. Jayasankar, T, Thangarajan, R & Arputha Vijayaselvi, J 2011, Automatic Continuous Speech Segmentation to Improve Tamil Text-to-Speech Synthesis, International Journal of Computer Applications, vol. 25, no.1, pp.31-36.  
I.F: 3.12
5. Jayasankar, T, Arputha Vijayaselvi, J, 2011, 'Embedded Unit Selection with Limited Data Base for Tamil Text-to-Speech Synthesis', CIIT International Journal of Programmable Device Circuits and Systems, vol. 3, no. 1, p.37-40  
IF 0.98.

### **International Conferences**

1. J.Arputha Vijaya Selvi, R.Hemalatha and T.Pasupathi, 'An Inspired Underwater Communication Robotic Fish for Aquatic Animals', 1<sup>st</sup> International Conference on Innovations in Information and Communication Technology (ICIICT), CHENNAI, India, 2019, pp. 1-7, doi: 10.1109/ICIICT1.2019.8741356.
2. R.Rajeshwari, T. Pasupathi and J. A. Vijaya Selvi, 'Wavefront Compensation Technique for Terrestrial Line of Sight Free Space Optical Communication', 1<sup>st</sup> International Conference on Innovations in Information and Communication Technology (ICIICT), Chennai, 2019, pp.1-7.
3. J. Arputha Vijaya Selvi, J. Niranjan Samuel et.al, 2017, 'Internal Lighting by Solar Collectors and Optical Fibers – A Review', TEQIP-II sponsored International Conference on Microwave and Optical Communication, Alagappa Chettiar College of Engineering & Technology, Karaikudi.
4. J. Baskaran, J. Arputha Vijaya Selvi, 2016, 'Comparision of trust based protocols for MANET', Second International Conference on Intelligent Computing and Systems, NSN College of Engineering and Technology, Karur
5. Vaddi Naga Padma Prasuna, A Valarmathi, J Arputha Vijaya Selvi, "Parametric Analysis of a Novel Reconfigurable Wireless Sensor Network Architecture", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp.91-95.
6. Vaddi Naga Padma Prasuna, A Valarmathi, J Arputha Vijaya Selvi, "Finite State Markovian Model for Trustworthy Reliable Communication in Dynamic Reconfigurable Wireless Sensor Network Architecture", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp.146-151.
7. S G Susila, J Arputhavijayaselvi, "Efficient Mobile Transporter in WSNs Lifetime Enhancement", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp. 175-180
8. T.Jayasankar, A.Appas Apdulrajak,J.Arputha Vijaya selvi, "Improvement of Speaker Identification System Using MFCC and Pitch Based MFCC in Noise Environment", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp 475-478

9. Pasupathi T, Arputha Vijaya Selvi J, Niranjana Samuel J, "Mitigation Of Low-Order Atmospheric Turbulent Effects Using Sensorless Adaptive Optics In Terrestrial Free Space Optical Communication", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp 514-519
10. R.Leoraj, J.Arputha Vijaya Selvi, "Comparative performance analysis of forward error correcting codes for Free Space Optical Communication", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp 529-534
11. B.Priya J.Arputha Vijaya Selvi, "Dynamically Reconfigurable Multilevel Multiphase Space Vector Pulse Width Modulator for Overmodulation Region", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), Kings College of Engineering, Punalkulam, pp 735-738.
12. Arockia Basil Raj, A & Arputha Vijaya Selvi, J & Kumar, D, 'Low Cost BER Measurement in Wireless Digital Laser Communication Link with Autonomous Beam Steering System', 3rd Int.Conf. Intelligent Information Systems and Management, pp.146-151, 2012.
13. A.Arockia Basil Raj, J. Arputha Vijaya Selvi, and D. Kumar, Experimental Analysis and Mitigation of Atmospheric Turbulence Effects in Terrestrial Free Space Line of Sight Optical Communication using Pipelined Opto-Electronic Architecture, International Journal on Information and Communication Technologies, Vol.4, No.1-2, pp.17-21, 2011.
14. Arockia Basil Raj, A & Arputha Vijaya Selvi, J, 'Lower-Order adaptive beam steering system in terrestrial free space point-to-point laser communication using fine tracking sensor', Int. Conf. Signal Processing, Communication, Computing and Networking Technologies, Thuckalay, pp. 699-704, 2011.
15. Arockia Basil Raj, A, Arputha Vijaya Selvi, J, Sathiya, R, Shanthi,A, Sharmila, M. Soumiya, L.K., Low Cost beam steering system for FSOC to SMF Coupling, IEEE International Conference on Advances in Engineering, Science & Management, Nagapatnam, pp. 49-54, 2011.
16. Arockia Basil Raj, A, Mohammed Ismail, J Niranjana Samuel & Arputha Vijaya Selvi, J, 'Implementation of Adaptive Fuzzy Logic Controller in FPGA for steering Tip-Tilt Mirror in Free Space Optical Communication', Int. Conf. Computational Intelligence and Computing, Levengipuram, pp.1-5, 2011.
17. Arockia Basil Raj, J. Arputha Vijaya Selvi, and S. Raghavan, 'Terrestrial Free Space Line of Sight Optical Communication (TFSLSOC) using Adaptive Control Steering System with Laser beam Aligning, Tracking and Positioning', Proceedings of ICWCSC2010- International Conference on Wireless Communication and Sensor Computing, SSN College of Engineering, Chennai, 2010, pp.1-5 .
18. J. Arputha vijaya selvi, T.K.Radhakrishnan, and S.Sundaram, "Model based fuzzy tuned PID controller for processes with dead time", Proceedings of MS-2006, 879 - 884, Malaysia, April, 2006.
19. A.Balaji Ganesh, J.Arputha vijaya selvi, and T.K.Radhakrishnan, "Model based corrosion mitigation through differential conductivity", Proceedings of MS-2006, 376 - 378, Malaysia, April, 2006.

### C. Patent Details:

1. Patent Application No. 202141036845  
Status of Patent **Published**  
Inventors Name Dr.P.Narasimman Dr. J. Arputha Vijaya Selvi  
Title of the Patent Electricity Conservating System and Method  
Thereof
2. Patent Application No. 3117/CHE/2010 A  
Status of Patent **Published**  
Inventors Name Dr. V. Arumugham, Dr. J. Arputha Vijaya Selvi,  
Dr. K. Anbudurai, Ms. S.V. Ezhilmathy  
Title of the Patent Cow Matrix

### *Research interest:*

- Signal processing
- Simulation and control

### *Ph.D. Guidance*

- Recognized supervisors in
- Anna University (2440022)
  - Completed – 11
  - Guiding – 05
- VELS University (ES34)
  - Completed – 01

### *PG Guidance*

- Guided – 08

### III. PROFESSIONAL EXPERIENCE

<i>Period</i>	<i>Positions held</i>	<i>Name of the Institution</i>
July 2017 – till date	Principal and Professor / Electronics and Communication Engg. Dept.	Kings college of Engineering, Punalkulam , Gandarvakottai Tk., Pudukkottai Dt. – 613 303.



May 2013 – June 2017	Dean (R &D) and Professor (ECE)	
November 2011 - May 2013	Principal (i/c) cum Head / Electronics and Communication Engg. Dept.	
March 2007 – November 2011	Professor and Head / Electronics and Communication Engg. Dept.	
June 2003 – July 2004	Principal	Idhaya Engineering College for Women, Chinnasalem – 606 201, Villupuram Dt.
September 2000 – June 2003	Senior Lecturer	SASTRA Deemed University, Tirumalaisamudram, Thanjavur – 613 402.
Jan 1995 – August 2000	Lecturer	Shanmugha College of Engineering, (SASTRA Deemed University), Tirumalaisamudram, Thanjavur – 613 402.

***Subjects handled:***

**UG**

Signals and systems  
Control systems  
Digital Signal Processing  
High speed networks  
Communication systems  
Advanced Microprocessors  
Microprocessor Architecture  
Digital Electronics  
Electron devices and circuits  
Electronic circuits  
Medical Electronics

**PG**

Digital Signal Processing  
Advanced Digital Signal Processing  
Data Compression  
System on Chip  
Testing of VLSI Circuits

#### **IV. FELLOWSHIPS / AWARDS / MEMBERSHIP IN PROFESSIONAL SOCIETIES:**

- Facilitator certification award in HRD by Aim Insights, The HRD Group, Mangalore – 575 002.
- Life member – Semiconductor Society of India, New Delhi.
- Member – Indian Society for Technical Education (ISTE), New Delhi.
- Member – IEEE
- Faculty Advisor – IEEE – WIE
- Student Branch Counselor – STB 16621

#### **V. TRAINING PROGRAMMES / SEMINARS / CONFERENCES / IV ATTENDED:**

1. AICTE – ISTE sponsored *short term training programme* on “Process control in Chemical Industries” organized by the Department of Technology, Annamalai University, Chidambaram, during 15 - 26, November, 2004.
2. AICTE – ISTE sponsored *short term training programme* on “Advanced Communication Systems” organized by SASTRA Deemed University, Thanjavur, during 12 - 25, March, 2001.
3. *Short term training programme* on “40 Hour course on E-Commerce” conducted by Centre for reliability, Chennai, during 25 - 29, September, 2000.
4. *Three day course* on “Finite elements in Engineering” conducted by Shanmugha College of Engineering, Thanjavur, during 2 - 4, May, 2000.
5. ISTE sponsored *short term course* on “Neural networks and Fuzzy logic applications” organized by Shanmugha College of Engineering, Thanjavur, from 07 - 19, June, 1999.
6. AICTE sponsored *National seminar* on “Trends in Biomedical Instrumentation” organized by Shanmugha College of Engineering, Thanjavur, from 09 - 11, October, 1999.
7. AICTE sponsored *National seminar* on “Multimedia on the move” organized by Shanmugha College of Engineering, Thanjavur, from October 30 - November 1, 1999.

8. Ministry of C&IT, AICTE and IEEE sponsored *National workshop* on “Embedded Systems” organized by SASTRA Deemed University, Thanjavur, from 12 – 14, September, 2002.
9. *International conference* on “Nanocomputing – Technology Trends” held at SASTRA Deemed University, Thanjavur, from 16 – 18, December, 2001.
10. *Industrial visit* to Videsh Sanchar Nigam Ltd., Chennai, from 24 - 28, April, 2000.
11. *Short term training programme* on “Guided & Free Space Optical Communication” conducted by Indian Institute of Technology, Karnataka, during 16 - 20, August, 2011.

**VI. GUEST LECTURE DELIVERED/ SESSION CHAIRED / JOURNALS EDITED / PAPERS REVIEWED / THESIS REVIEWED / PROJECTS REVIEWED**

1. Delivered Talk on Women Empowerment during the International Women’s Celebration 2022 at Queens College of Arts & Science for Women, Pudukkottai.
2. Reviewer of MDPI – Sensors Journal
3. Reviewer - Journal of Computer Systems Science and Engineering
4. N. Sivakumaran, J. Arputha Vijaya Selvi and K. Vinoth Kumar (Editors), Bioscience Biotechnology Research Communication, Special Issue in Communication and Information Technology, Vol. 12, No. 1, March 2019.
5. Delivered Invited Talk in the National Conference on “Recent Innovations in Engineering & Science”, organized by University College of Engineering, Pattukkottai on 06<sup>th</sup> April, 2018.
6. Chaired a session in the International Conference on “Emerging Trends in Electrical, Electronics and Communication Systems”, organized by University College of Engineering, BIT, Anna University, Trichy on 24<sup>th</sup> September, 2016.
7. Delivered a guest lecture on "Adaptive Optics" at SASTRA University, Kumbakonam.

## **VII. PROJECTS HANDLED**

1. MOCIT Sponsored Project on “SMEs & Innovation: A Case Study for Tamil Nadu State” with a financial outlay of Rs. 33.44 Lakhs was successfully completed. – *Chief Investigator*
2. DRDO Sponsored research project on “Mono-Pulse & Artificial Neural Networks based Steering Technique for Free Space Line of Sight Optical Communication (FSLSOC)” with a financial outlay of Rs. 30.556 lakhs was successfully completed. – *Principal Investigator*
3. MHRD - AICTE sponsored MODROBS project on “Modernization of Analog & Digital Electronics Laboratory” with a financial outlay of Rs. 10 lakhs was successfully completed. – *Principal Investigator*
4. MHRD – AICTE sponsored MODROBS project on “MODROB for DSP lab” with a financial outlay of Rs. 7.39 lakhs was successfully completed. – *Principal Investigator*
5. MHRD – AICTE sponsored Innovation Promotion Scheme – “Project Expo” with a financial outlay of Rs. 1 lakh was successfully completed. – *Principal Investigator*
6. DST- NIMAT sponsored “Entrepreneurship Awareness Camp” with a financial outlay of Rs. 13,500 was successfully completed. – *Principal Investigator*
7. CSIR sponsored seminar on “Design of Opto-electronic Integrated Circuit and Parallel Processor in FPGA” with a financial outlay of Rs. 30,000 was successfully completed. – *Coordinator*
8. IEEE Madras Section, Chennai – Int. Conference 2016 with a partial grant-in-aid of Rs. 7,500 was successfully completed. – *Coordinator*

## **VIII. Seminars / Workshops / Conferences Organized**

1. Faculty Development Programme on “VLSI design” during 27<sup>th</sup> & 28<sup>th</sup> July 2007.
2. National Conference on “Frontier Areas of Research in Computer, Communication & Control Engineering - COFRACCCE’08” during 06<sup>th</sup> & 07<sup>th</sup> March 2008.

3. ISTE Sponsored National Conference & Convention “Innovative Role of Technocrats in Research for Social and Rural Development” during 2008.
4. DRDO, New Delhi, sponsored National Conference on “Emerging Trends in Strengthening National Security and Self Reliance” during 2009.
5. MCIT, New Delhi, sponsored regional seminar on “SMEs & Innovation: A Case Study for Tamil Nadu State” at Hotel Sangam, Tiruchirappalli on 26<sup>th</sup> October, 2009.
6. Workshop on “Robotryst 2011” in association with Robosapiens 20<sup>th</sup> & 21<sup>st</sup> December 2011.
7. Workshop on “Expert System Design & Modeling with Numerical Solutions for Real-time Engineering Problems” on 12<sup>th</sup> & 13<sup>th</sup> July, 2012.
8. Workshop on “Recent Advances in Optical and Microwave Engineering” on 26<sup>th</sup> & 27<sup>th</sup> of July 2012.
9. Regional Seminar on “Research Opportunities in Opto-electronic Devices” on 13<sup>th</sup> March, 2012.
10. Workshop on “High Performance System Design using Xilinx and MATLAB”.
11. Regional Workshop on “An Introduction to VLSI Design”.
12. National Conference on “Emerging Trends in Computer, Communication and Instrumentation in Strengthening National Security - ETCCI'12” on 12<sup>th</sup> March, 2012.
13. Regional Project Expo “Techking 12” on 31<sup>st</sup> March, 2012.
14. Seminar on “Awareness on Calibration” during April 2013.
15. Seminar on “Awareness on Calibration for Laboratory Accreditation” on 26<sup>th</sup> July, 2013.
16. Seminar on “Intellectual Property Rights” in association with Indian Patent Office, Chennai during 30<sup>th</sup> August, 2013.
17. CSIR sponsored workshop on “Design of Opto-Electronic Integrated Circuit and Parallel Processor in FPGA” during 23<sup>rd</sup> – 25<sup>th</sup> September, 2013.
18. DST – NIMAT sponsored “Entrepreneurship Awareness Camp” during 07<sup>th</sup> – 09<sup>th</sup> January, 2014.
19. AICTE sponsored project EXPO “Electrowaves 2k14” during 20<sup>th</sup> – 22<sup>nd</sup> March, 2014.

20. Workshop on Android Systems on 25<sup>th</sup> & 26<sup>th</sup> July, 2014.
21. Workshop on “Research Methodology & Statistical Tools for Research” was organized on 26<sup>th</sup> September, 2014.
22. “Project EXPO” under IEEE Student Branch exclusively for the first year students on 10th October, 2014.
23. Seminar on “Art of Writing a paper” for our PG students & external participants during 30<sup>th</sup> January, 2015.
24. Workshop on “Robotics” on 13<sup>th</sup> February, 2015 to make the students to acquire knowledge in building robots.
25. “Project EXPO” exclusively for polytechnic students was organized on 24<sup>th</sup> February, 2015.
26. Workshop on “Signal Processing using Xilinx System Generator” on 24<sup>th</sup> August, 2015.
27. IEEE sponsored International conference on Emerging trends in engineering, technology and science (ICETETS-2016) during 24<sup>th</sup> to 26<sup>th</sup> February, 2016.
28. IEEE Computational Intelligence Society technically sponsored workshop on Soft Computing on 28<sup>th</sup> January, 2017.
29. Workshop on Research Methodology and Statistical Tools for Research on 25<sup>th</sup> February, 2017.

## **IX. PERSONAL PROFILE**

Name	-	J. ARPUTHA VIJAYA SELVI
Date of Birth	-	20 -10 -1969
Father’s name	-	R.Arockiasamy
Gender	-	Female
Marital status	-	Married
Nationality	-	Indian
Linguistic proficiency	-	Tamil and English