

Dr. A. MUTHAMIZH SELVAN MCA.,M.Phil.,Ph.D.,UGC-NET.,

Associate Professor

Department of Computer Science and Application
Faculty of Computing Sciences and Engineering
Periyar Maniammai Institute of Science and Technology (PMIST)
Periyar Nagar, Vallam, Thanjavur, TamilNadu - 613403.

E-Mail : drmuthamizh@pmu.edu / muthamizhela@gmail.com

Mobile : +91 – 807 290 7061 / +91 – 948 860 4673



Scopus ID : **46662085200** WoS ID : **E-1545-2016** ORCID ID : **0000-0003-4086-843X**

RESEARCH INTEREST AND SPECIALISATION

- Digital Speech and Image Signal Processing, Speech and Language Technology
- Natural Language Processing (NLP)
- AI and Machine Learning

QUALIFYING TESTS

- **UGC - NET** qualified on June 2012 (E-Certificate No. **121054674**)

FELLOWSHIPS AND AWARDS

- **Doctoral Research Fellowship** awarded by National Testing Service (NTS) - India, Central Institute of Indian Languages (CIIL), Ministry of HRD, Govt. of India, Manasagangotri, Mysore - 570 006 since 2007-2008.

PROFESSIONAL MEMBERSHIPS

- ISTE Annual Member since January 2007
- IEEE Signal Processing Society Member since January 2008
- IEEE Computer Society Member since January 2011

RESEARCH AND TEACHING EXPERIENCE

Research	3 yrs (Excluding Ph.D)	Teaching	UG : 6 years and PG : 10 years
----------	-------------------------------	----------	--

RESEARCH AND PROFESSIONAL OUTCOMES

BOOKS :

1. Translator : "Text Book for Vocational Diploma"
Published by Tamil Nadu Open University, Chennai (2019).
2. Author : "Speech Analysis and Processing using COLEA - A Tool Guide"
Published by Periyar E.V.R. - Nagammai Education and Research Trust, Chennai with the ISBN 819-098687-2, (2013).
3. Author : "MATLAB recipes for Numerical Solutions"
Text book published by Periyar E.V.R. - Nagammai Education and Research Trust, Chennai with the ISBN 819-098685-6, (2012).
4. Associate Editor : "Recent Trends in Computer Science Research"
Seminar Proceedings published by School of CSE, Bharathiar University, Coimbatore, (2007).

FUNDED PROJECT REPORTS :

1. **Muthamizh Selvan. A**, Shashi Kanta Tarai, and Executing Team
"Speech Synthesis (TTS for Tamil & Oriya) - An Application for the Blind"
Research project report published by International School of Dravidian Languages (ISDL), Thiruvananthapuram - 695 586, Kerala, January 2005, funded by Department of Science and Technology, New Delhi.

INTERNATIONAL JOURNALS :

1. **Muthamizh Selvan. A**, Rajesh. R, "Gammatone based HOG for Speech Classification", *Advances in Intelligent Systems and Computing*, 2020, Springer Journal (Communicated).
2. **Muthamizh Selvan. A**, Rajesh. R, "A Neural Network Based System for the Classification of Speech and Song", *European Journal of Scientific Research* (ISSN 1450-216X / 1450-202X), Vol. 118, No. 1, pp. 23-27, 2014.
3. **Muthamizh Selvan. A**, Rajesh. R, "Spectral Histogram of Oriented Gradients (SHOGs) for Tamil Language Male / Female Speaker Classification", *International Journal of Speech Technology* (ISSN 1381-2416), Springer, Volume 15, No. 2, pp.259-264, 2012.
4. **Muthamizh Selvan. A**, Rajesh. R, "Word Classification using Neural Network", *Communications in Computer and Information Science* (ISSN 1865-0929), Springer, Volume 192, pp. 497-502, 2011.

INTERNATIONAL CONFERENCES :

5. **Muthamizh Selvan. A**, Rajesh. R, "Word Classification using Neural Network", *Proceedings of International Conference on Advances in Computing and Communications* (ACC - 2011), pp.787-793, 2011.
6. **Muthamizh Selvan. A**, Rajesh. R, "Speech and Song Classification using Pattern Recognition Neural Network", *Proceedings of 6th International Conference on Speech Technology and Human-Computer Dialogue (SpeD 2011)* organized by Transylvania University of Braşov, Romania, and Published by IEEE (ISBN- ISBN 978-1-4577-0439-0), pp.205-207, May 2011.
7. **Muthamizh Selvan. A**, Rajesh. R, "Automatic Speech Recognition (ASR) for Tamil", *Proc. of International conference on Intelligent Systems and Control (ISCO - 2006)*, Coimbatore, pp.568-572, 2006.

NATIONAL CONFERENCES :

8. **Muthamizh Selvan. A**, Rajesh. R, "Pitch and Formants based Fuzzy Classification of Song and Speech", *Proceedings of National Conference on Advanced Computing and Communication* (NCACC - 2013), 2013.
9. **Muthamizh Selvan. A**, Balamurugan. P, and Rajesh. R, "Relevance of Adaptive Neuro Fuzzy Inference System (ANFIS) in Classifying Acoustic & Image Data", *Proc. of National Conference on Frontier Research Areas in Computing Science*, 2007.

NATIONAL SEMINARS :

10. **Muthamizh Selvan. A**, Balamurugan. P, and Rajesh. R, "A Study on Adaptive Network Fuzzy Inference System (ANFIS) and its Applications", *Proceedings of National Seminar on Recent Trends in Computer Science Research* (RTCSR - 2007), pp. 14-17, 2007.
11. **Muthamizh Selvan. A**, Suresh. T, "Traveling Salesman Problem using Neural Networks", *Proceedings of National Seminar on Recent Trends in Computer Science Research* (RTCSR - 2007), pp. 30-31, 2007.

RESEARCH REVIEWER :

1. *International Journal of Technology and Human Interaction (IJTHI)*
Indexed in WoS, ESCI, SCOPUS, Compendex (Elsevier Engineering Index)

INVITED TALKS :

INTERNATIONAL WORKSHOPS :

1. "Speech Technology and Applications for Tamil", Lecture in *International Workshop on Natural Language Processing* organized by Kani Tamil Peravai, Tamil Virtual Academy, Govt. of Tamil Nadu, Chennai on 7th May 2016.
2. "Speech Analysis Tools", Lecture in *International Workshop on Tamil Computational Linguistics* jointly organized by SRM University, Chennai with Linguistic Data Consortium for Indian Languages (LDC - IL), Mysore held at Chennai, India on 28th January 2012.

NATIONAL SEMINARS :

3. "Advancements in Tamil Computing ", Seminar on "Tamil Computing" organized by Guru Shree Shanthivijai Jain College For Women, Chennai on 18th December 2019.
4. "Tools and Applications for Tamil Computing ", FDP & Workshop on "Tamil Language in Computer" organized by Shri Shankarlal Sundarbai Shashun Jain Womens College, T.Nagar, Chennai during 22nd and 23rd February 2019.
5. "Modern Perspective in Language Tehnology for Tamil ", Seminar on "Tamil Language in Computer" organized by "Vinai Tamil Iyakkam" an International Tamil Research Forum, Chennai during on 17th February 2019.
6. "Tamil Language in Computer Applications", Lecture in *National Seminar on "Utility of Tamil Language in Modern Global World"* organized by Tagore Arts and Science College, Chrompet, Chennai on 15th September 2017.
7. "A Short Review on Tamil Text - To - Speech (TTS) Synthesis", Lecture in *National Seminar on Speech Synthesis and its Applications* jointly organized by Dept. of Linguistics, University of Kerala with Linguistic Data Consortium for Indian Languages (LDC - IL), Mysore held at Trivandrum on 10th July 2012.
8. "Right PG in Computer Science & IT", Lecture in *Academic Counseling Seminar on "Right PG - Bright Career"* jointly organized by Dept. of Career Guidance & Student Welfare, Bharathiar University with Sree Saraswathi Thyagaraja College held at Pollachi on 3rd April 2007.

STATE LEVEL SEMINARS :

9. "Rebels and Revolutions in Human - Machine Interactions", Lecture in *One Days Statel Level Seminar* organized by PG and Research Dept. of Computer Science, Dr.R.K.S College, Kallakurichi on 12th, February 2019.
10. "Picketing of Liquor Shops during the British Period", Lecture in *Two Days Statel Level Seminar on Prohibition in India* organized by Dept. of History, Arul Anandar College, Madurai during 30 - 31, August 2016.

KNOWLEDGE SHARING AND GAINING IN RESEARCH EVENTS

Sl. No.	Name of the Event	Places & Dates	Title of the Paper Presented
INTERNATIONAL CONFERENCES			
01	International Conference on Advances in Computing and Communications (ACC - 2011)	Rajagiri School of Engineering & Technology, Kochi. 22-24, July 2011	Word Classification using Neural Network
02	International conference on Intelligent Systems and Control (ISCO - 2006)	Karpagam College of Engineering, Coimbatore. 9-11, August 2006	Automatic Speech Recognition (ASR) for Tamil
NATIONAL CONFERENCES			
03	National Conference on Advanced Computing and Communication (NCACC - 2013)	Sree Buddha College of Engineering, Pattoor, Alapuzha 22-23, March 2013	Pitch and Formants based Fuzzy Classification of Song and Speech
04	National Conference on Recent Advances in Statistics and Computer Applications	Dept. of Statistics, Bharathiar University, Coimbatore. 21-23, December 2010	---
05	National Conference on Frontier Research Areas in Computing Science	Dept. of CSE, Bharathidasan University, Tiruchirappalli 5-6, October 2007	Relevance of Adaptive Neuro Fuzzy Inference System in Classifying Acoustic & Image Data
INTERNATIONAL SEMINARS			
06	International Seminar on Research in Computers: Why, What and How?	Bharathiar University, Coimbatore 11 th March 2013	---
07	International Seminar on Cyber Security (ISCS - 2013)	Bharathiar University, Coimbatore 9 th March 2013	---
08	International Seminar on MATLAB and Simulink for Engineering Education	Mathworks India, Coimbatore. 6 th March 2013	---

NATIONAL SEMINARS			
09	National Seminar on Speech Synthesis and its Applications	Dept. of Linguistics, University of Kerala. 09-11, July 2012	A Short Review on Tami Text - To - Speech (TTS) Synthesiser
10	National Seminar on Research in Computers: Why, What and How?	School of CSE, Bharathiar University, Coimbatore. 13 th December 2010	---
11	National Seminar on Recent Trends in Computer Science Research	School of CSE, Bharathiar University, Coimbatore. 6-7, March 2007	Adaptive Network Fuzzy Inference System and its Applications
12	National Seminar on Recent Trends in Computer Science Research	School of CSE, Bharathiar University, Coimbatore. 6-7, March 2007	Traveling Salesman Problem using Neural Networks
INTERNATIONAL WORKSHOPS			
13	International Workshop on MOODLE Learning Management System (LMS)	IIT Bombay held at Vels University, Chennai 15 th , March 2019	---
14	International Workshop on Image Processing using MATLAB	CIRF and Nasareth College Avadi, Chennai. 29 - 30, January 2019	---
15	International Workshop on Natural Language Processing	Tamil Virtual Academy Govt. of Tamil Nadu, Chennai. 02 - 08, May 2018	Speech Technology and Applications for Tamil
16	International Workshop on Tamil Computational Linguistics	SRM University, Chennai, India. 20-30, January 2012.	Speech Analysis Tools
17	6 th Winter School on Speech and Audio Processing (WiSSAP) - 2011	IIT - Guwahati, Assam, India. 8-11, January 2011	---
18	INAE Workshop on Image & Speech Processing (WISP)	IIT- Chennai, India. 27-28, February 2006	---
INTERNATIONAL WEBINARS			
19	MDP Conference on The Evolution of Organisations : How to Create an Innovative Company?	Indian Institute of Management (IIM) Visakhapatnam, 16-17, August, 2021	---
20	Research Methodology and Cloud Computing	Sri Meenakshi Vidiyal Arts and Science College, Tiruchi, India. 29, May 2020	---
21	What You See is What You Mean, a walk-through on LATEX	IEEE and Central University of Kerala, Kasaragod 28, May 2020.	---
22	Artificial Intelligence and Cloud Technology	Mizoram University, Mizoram, India. 28, May 2020	---
23	Network at a Glance	BBDE College, Dr. APJ Abdul Kalam Technical University Lucknow, India. 22, May 2020	---
24	Cloud-Today & Tomorrow	BBDE College, Dr. APJ Abdul Kalam Technical University Lucknow, India. 22, May 2020	---
25	Machine Learning using Python	BBDE College, Dr. APJ Abdul Kalam Technical University Lucknow, India. 21, May 2020	---
26	A Montessori Talk on Machine Learning	IEEE and Central University of Kerala, Kasaragod 21, May 2020.	---
NATIONAL WORKSHOPS			
27	Workshop on Tamil Language Computing	Tamil Virtual Academy Govt. of Tamil Nadu, Chennai. 23 - 24, February 2016	---
28	Workshop on Tamil Language Computing	Tamil Virtual Academy Govt. of Tamil Nadu, Chennai. 31, October 2015	---

29	National Workshop on Research in Frontier Areas of Information Science and Technology	School of Information Science and Technology, Kannur University, Kannur, Kerala. 5 - 9, September 2007	---
30	5 th Workshop on Science Writing and Journalism	NCSTC, Govt. of India and Bharathiar University, Coimbatore. 21-25, June 2006	---
INTERNATIONAL TUTORIALS			
31	Tutorial of INAE Workshop on Image and Speech Processing	IIT- Chennai, India. 26 th February 2006	---
NATIONAL SYMPOSIUMS			
32	National symposium on “Novels Trends in Information Technology”	Ramakrishna College of Arts & Science for Women, Coimbatore. 25 th August 2006	---
FACULTY DEVELOPMENT PROGRAMMES (FDP)			
33	Emerging Technologies : Research Issues and Challenges	Seth Vishambhar Nath Institute of Engineering & Technology, Barabanki, U.P., 10 – 16, June 2020	---
34	Computational Tools on Engineering and Research : Opportunities and Challenges	R.R Institute of Modern Technology, Lucknow 01 – 06, June 2020	---
35	Tamil Computing Applications	Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, 12 th , August 2017	---
TRAINING PROGRAMMES			
36	ISTE-AICTE sponsored Training Programme on “Soft Computing Techniques employed in Image Processing and Cryptography”	School of Computing, SASTRA University, Thanjavur, India 26 – 30, March 2007	---
CERTIFICATE COURSES			
37	Certificate Course completed on “Artificial Intelligence & Drug Discovery”	Shri Vithal Education & Research Institute’s College of Pharmacy, Pandharpur, Maharashtra, India 20th April 2020	---

RESEARCH EVENTS AND PROGRAMMES ORGANISED :

- Co-ordinator : FDP on Steps towards Research
11 Jan. 2019, New Prince Shri Bhavani Arts & Science College.
- Co-ordinator : Workshop on Applications in Tamil Computing
19 Feb. 2018, New Prince Shri Bhavani Arts & Science College.
- Co-ordinator : Tamil Computing Seminar
8 March 2016, New Prince Shri Bhavani Arts & Science College.
- Program Committee : Technosis – 2016 (Technical Paper Fest)
13 Feb. 2016, New Prince Shri Bhavani Arts & Science College.
- Program Committee : International Workshop on Tamil Computational Linguistics
20-30 January 2012, SRM University, Kattankulathur-603 203.
- Program Committee : International Seminar on Mobile Applications
17 December 2013, School of CSE, Bharathiar University, Coimbatore - 641 046.
- Program Committee : National Seminar on Recent Trends in Computer Science Research,
6-7 March 2007, School of CSE, Bharathiar University, Coimbatore - 641 046.