

Faculty Profile



Dr. N. VELMURUGAN, M.E., Ph.D
Associate Professor and Deputy CoE, IT

HIGHLIGHTS:

- Number of Journal Publications: 17
- H-Index: 4
- Project Funding Received: Nil
- Patents Published: 4
- Patents Granted: Nil

PROFESSIONAL LINKS:

Scopus ID: 57189069156

Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57189069156>

Google Scholar ID: <https://scholar.google.com/citations?pli=1&authuser=1&user=6Yos7oYAAAAJ>

Anna University Faculty ID: 2122140

AICTE Faculty ID: 1-464417321

Anna University Supervisor ID: Nil

LinkedIn: <https://www.linkedin.com/in/velmurugan-natarajan-a37597112/>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 25 yrs 02 months
- Industrial Experience: Nil

AREA OF SPECIALIZATION:

- Data Security
- Cryptography
- Cloud Computing
- Big Data

PATENTS PUBLISHED/GRANTED:

- AGRICULTURE DRONE FOR MONITORING AND SPRAYING PESTICIDES - 370460-001 - 06/09/2022
- A MACHINE LEARNING ALGORITHM FOR DETECTING DRIVER DROWSINESS - 202341005615 A 10/02/2023
- BLOCKCHAIN ENABLED DEVICE FOR ENHANCING COMPUTER NETWORK SAFETY - 381141-001 - 09/03/2023

COURSES CERTIFIED:

- C Tutorial Course from SOLOLEARN - 6th May 2020

ACHIEVEMENTS AND AWARDS:

- Won the 4th consolation prize **Rs 25,000/-** for Auto Alert system for excessive solid waste dumping in Aji River/ Vokda in the event **RAJKOT SMART CITY HACKATHON 2017** organized by Rajkot Municipal Corporation at Rajkot, **Gujarat. India.**
- **BEST TEACHER** award for the academic year 2008 – 2009 at Saveetha Engineering College.

SPECIAL SESSIONS DELIVERED:

S.No	Date	Institution in which delivered	Level (National / International)	Conference / Workshop / Seminar / FDP on (Program Name)	Topic of the Lecture
	28.07. 2018	Nehru Memorial College	National	Seminar	Career Guidance

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**Conference / Workshop / Seminar / FDP attended:**

S.No	Date	Conference / Workshop / Seminar / FDP on (Name)	Level (National / International)	Institution
1	8th to 12th May 2023	Emerging Research Trends in Block Chain and Data Science	National	Dr. M.G.R University
2	10th to 14th August 2020	Online National Examinations Transformation - 2020	National	Council of Examiners, India and SkillSlate, MIT World Peace University, Pune, RR Inst. Bangalore
3	12th to 18th August 2020	Online IPR Awareness and Patent Protection	National	Sathyabama University
4	4th August 2020	A Platform for First Generation Entrepreneurs	National	Crescent Innovation and Incubation Council (CIIC)

5	29th June to 3rd July 2020	FDP on Embracing the Creative side of Teaching and Learning Methods	National	RMK College of Engineering and Technology
6	20th June 2020	Online Automation in the Cloud Software Applications	National	Saveetha Engineering College
7	20th June 2020	Online Examination Tools	National	Bishop Heber College
8	12th June 2020	Data Analytics and Applications	National	Bishop Heber College
9	1st to 5th June 2020	FDP on Big Data Engineering	National	Kings Engineering College
10	22nd June 2020	Artificial Intelligence – A Walk Through	National	Sathyabama University
11	29th May 2020	Joy of Engineering	National	Saveetha Engineering College
12	28th May 2020	Wireless Mesh Technologies	National	Saveetha Engineering College
13	26th May 2020	High Performance Computing	National	Saveetha Engineering College
14	4th to 6th May 2020	Robotics Process Automation	National	Jeppiaar Institute of Technology
15	10 th to 20 th July 2014	2-week ISTE workshop on Cyber Security	National	Saveetha Engineering College, IIT Bombay, MHRD, Govt. of India
16	30 th and 31 st January 2014	workshop on Recent Trends in Network Simulation Tool (NS2)	National	Saveetha Engineering College
17	24 th and 25 th October 2013	Cloud Setup – Software and Solutions	National	Anna University, Chennai
18	13th to 15th Nov 2013	Mission10X Engineering Workshop	National	WIPRO at Saveetha Engineering College
19	10 th and 11 th November 2012	ISTE workshop on Aakash for Education	National	IIT Bombay
20	6 th and 7 th March 2012	Master Trainer Program on DBMS	National	ICT Academy of Tamilnadu
21	8 th to 12 th May 2011	FDP on Theory of Computation	National	MIT
22	4th April 2011	Internal Auditor course on Quality Management System (QMS)	ISO 9001:2008	BMQR
23.	5 th and 6 th August 2010	AICTE sponsored National Seminar on Number Theory and Cryptography	National	Rajalakshmi Engineering College
24.	21 st to 28 th April	AICTE sponsored National	National	Saveetha Engineering

	2010	Staff Development Programme on Recent Trends in Network Technologies		College
25	7 th and 8 th August 2009	workshop on How to do Research	National	Sathyabama University
26	28 th and 29 th January 2009	ISTE sponsored workshop on A Practical Approach to Algorithms	National	SVCE
27	4 th January 2008	workshop on Web Applications and Technologies	National	Saveetha Engineering College
28	16 th November 2006	Workshop on Academic Alliance	National	Dr. M.G.R. University

Papers presented in Conferences:

S.No	Date	Conference Name	Level (National / International)	Institution	Paper Title
1	2017	International Conference on Innovations in Electrical, Information and Communication Engineering (ICIEICE'17), CSI	International	Kongunadu College of Engineering and Technology, Trichy, Tamilnadu, India	A Survey: Data Security Issues, Security, Algorithms and Cloud Architecture
2	2015	International Conference on Innovation Information in Computing Technologies (ICIICT), 2015, IEEE	International	Saveetha Engineering Chennai, Tamilnadu, India	Deduplication based storage and retrieval of data from cloud environment
3	2011	International Conference on Cloud Computing and Services (ICCCS) 2011, CSIR-INDIA and ICTACT	International	Saveetha Engineering Chennai, Tamilnadu, India	Privacy Preserving outlier Detection using association method
4	2009 (18 th September)	Emerging Trends in Information & Communication Technology (2009)	National	Saveetha Engineering College, Chennai, Tamilnadu, India	Entropy based algorithm for covering groups with mixed type attributes
5	2009 (11 th March)	Emerging Trends in Information & Communication Technology (ETICT 2009)	National	Saveetha Engineering College, Chennai, Tamilnadu, India.	Importance of Green Computing
6	2009 (28 th January)	Computing Technology 2009	National	Velammal College of Management & Computer Studies, Chennai, Tamilnadu,	An Improved Algorithm for Data Extraction

				India	
7	2009 (28 th January)	Computing Technology 2009	National	Velammal College of Management & Computer Studies, Chennai, Tamilnadu, India	Packet Loss Measurement using IDP Sensor
8	2008 (9 th January)	Computing Technology 2008	National	Velammal College of Management & Computer Studies, Chennai, Tamilnadu, India	Fuzzy Ontology Generation Technique
9	2007 (29 th March)	Business Intelligence in Enterprise Resource planning (BIERP'07)	National	Sree Sashta Institute of Engineering & Technology, Chennai, Tamilnadu, India	Genetic Algorithm for Web Mining
10	2007 (29 th March)	Business Intelligence in Enterprise Resource planning (BIERP'07)	National	Sree Sashta Institute of Engineering & Technology, Chennai, Tamilnadu, India	Genetic Algorithm for Clustering

Journal Publications

S.NO	Title of the paper	Name of the journal	National/ International	Issue Month / Year/ Page no. ISSN No. Impact Factor (Mention if it is Scopus indexed Annexure Journals)
1	Rat swarm political optimizer based deep learning approach for lung lobe segmentation and lung cancer detection using CT images	Biomedical Signal Processing and Control	International	1746-8094/© 2025 Published by Elsevier Ltd. Annexure
2	Resource Allocation in Cloud Computing	Journal of Advances in Information Technology, Vol. 14, No. 5, 2023	International	Volume 14 Issue 5 Pages 1063-1072
3	Deduplication based storage and retrieval of data from cloud environment	Innovation Information in Computing Technologies (ICICT)	International	IEEE Pages 1-6
4	An Inimitable Mechanism and Architecture for Security in Cloud using Multi Cloud	International Journal of Recent Technology and Engineering (IJRTE)	International	Volume 8 Issue 5 Pages 1627 - 1631

5	An Invincible Rudimentary Architecture for Data Security in Cloud Environment Using Multi Cloud	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	International	Volume 8 Issue 11 Pages 2413-2421
6	Analysis of Security Categories And Algorithms In Cloud Computing,	International journal of Interdisciplinary in Engineering Science and Technology	International	Volume 2, Issue 01, Pages 8, 2017. ISSN (2455-8494)
7	Study on Ontology Model for Web Information Gathering	International Journal of Advanced Engineering Research and Science (IJAERS)	International	Vol-1, Issue-7, Dec. - 2014] ISSN: 2349-6495
8	Effective Analysis of Cloud Based Intrusion Detection System	International Journal of Computer Applications & Information Technology	International	Vol. I, Issue II, September, 2012 (ISSN: 2278-7720)
9	Intrusion detection mechanism based on cloud computing security services	International Journal Of Computer Application	International	Issue2, Volume 2 (April 2012) ISSN: 2250-1797
10.	Visual Pixel Expansion of Secret Image	Global Journal of Computer Science and Technology	International	Volume 11 Issue 20 Version 1.0 December 2011, Global Journals Inc. (USA) Online ISSN: 0975-4172 & Print ISSN: 0975-4350
11	Limited Speech Recognition for Controlling Movement of Mobile Robot	International Journal of Engineering Science and Technology	International	Volume 2, Issue 10, 2010, Pages 5275-5279

Conference/Workshop / Seminar / FDP Organised (as a single or 2 persons team)

S.No	Date	Institution in which conducted	Level (National / International)	Conference / Workshop / Seminar /FDP on (Name)	Responsibility
1.	25th and 26th September	Department of MCA at Saveetha Engineering College	National	infoconviviality 2008, National level Technical Symposium	Secretary

	2008				
2	25th and 26th September 2008	Department of MCA at Saveetha Engineering College	National	infoconviviality 2008, National level Technical Symposium	Judge for VAYATI (coding)

PROFESSIONAL MEMBERSHIPS

S.No	Name of the society / any other forum	Position (whether just a member or has any post)	Date of Joining	Reg.No
1	ISTE	Life member	2008	LM54852
2	IAENG	Member – Annual	2015	163257
3	CSTA	Basic Member - Annual	2016	41113795
4	UACEE	Senior - Three years	2016	AM10100054019

OTHER DETAILS (If any):

Proficiency Award for the course of “Properties of Matter and Acoustics” in UG programme
University level

Project Trainee for IRS-P4 (PSLV – C3) satellite at Flight Dynamics Division, **ISRO Satellite Centre**, Bangalore from Dec 1998 to May 1999

Title of Ph.D. Thesis is Confidentiality, Protection and Privacy of Data in Cloud Environment
using Secure Multi-Cloud Architecture

Academic Awards and Honours:

Won the 4th consolation **prize Rs 25,000/-** for Auto Alert system for excessive solid waste dumping in Aji River/ Vokda in the event **RAJKOT SMART CITY HACKATHON 2017** organized by Rajkot Municipal Corporation at Rajkot, **Gujarat. India**

BEST TEACHER award for the academic year 2008 – 2009 in the department of MCA at Saveetha Engineering College.

Best Teacher Award for **100% result** in the Bigdata Analytics, Cloud Computing, Software Architecture, Object Oriented Programming, Internet Programming, Software Project and Quality Management, Computer Organization.

College Level Responsibility

Working as **Deputy Controller of Examinations** from June 2019 to Till date at Saveetha Engineering College.

Working as **Deputy Management Representative (DMR)** for ISO 9001:2008 from 2009 to 2019 at Saveetha Engineering College.

Worked as **DOT** students approval, **Examinations** process and other administrative works carried out from 2009 to 2013 at Saveetha Engineering College.

Worked as **Single Point of Contact (SPOC)** for **Smart India Hackathon (SIH)** from 2017 to 2020 at Saveetha Engineering College.

Worked as a **ZONAL OFFICER** of **Anna University of Technology Chennai** for conducting theory and practical Examinations under **ZONE III** colleges (26 colleges) from November 2010 to July 2012

Worked as a **Supervisor** for Civil Services (Preliminary) Examination 2014, conducted by **UPSC, Govt. of India**