



# SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4<sup>th</sup> Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution  
Tiruchirappalli - 620 002

**Name** : Dr.M.Gomathy  
**Designation** : Assistant Professor  
**Department** : Computer Science  
**Qualification** : M.Sc.I.T., M.Phil., M.C.A., Ph.D.,  
**Experience** : Teaching: 12 Research: 3  
**Area of Specialization(s)** : Artificial Intelligence, Big Data, Neural Networks  
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**Aadhar Number** : 3749 3027 1509

## Academic Qualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D	Computer Science	Shrimati Indira Gandhi College, Trichirappalli-02, Bharathidasan University	September 2014
M.C.A	Computer Application	Periyar University, Salem	2009
M.Phil	Computer Science	St.Joseph's College(Autonomous), Trichirappalli-02, Bharathidasan University	2004
M.Sc	Information Technology	Shrimati Indira Gandhi College, Trichirappalli-02, Bharathidasan University	2003

## Additional Qualifications Qualifications

<b>Diploma / Vocational / Certification</b>	<b>Area of Specialization</b>	<b>Institution / University / Agency Name</b>	<b>Year</b>
<b>Certification</b>	<b>Fundamentals of Computer system</b>	IGNOU	25-03-2021
<b>Certification</b>	<b>Introduction to Information Technology</b>	IGNOU	25-03-2021
<b>Certification</b>	<b>Cloud computing</b>	NPTEL	Feb-April 2021
<b>Certification</b>	<b>Computer Networks and Internet protocol</b>	NPTEL	Jan-April 2024

## Research Guidance

<b>Programme</b>	<b>No.ofScholars</b>	
	<b>Completed</b>	<b>Pursuing</b>
Ph.D(Computer Science)		<b>2</b>

## Research Publications (Indexed)

1. Study on security frameworks and data protection techniques for public cloud environment – ARPJ Journal of Engineering and Applied Sciences, Vol.11, No.9, May 2016.
2. An analysis of secure and efficient data transmission for cluster based wireless sensor networks – JMSR – Journal of Multidisciplinary Scientific Research - ISSN:2307-6976, pg.10-11, 2014.
3. Real Time Query scheduling for wireless sensor networks”, JMSR – Journal of Multidisciplinary Scientific Research - ISSN: 2307-6976, Vol.2, No.2, p. 1-3, 2014.
4. Fuzzy Logic and Neural networks based gender classification using three features - Inder science Publishers – International Journal of signal and imaging systems Engineering - ISSN: 0952-8091, Vol.7, Issue 2 pg. 75-82, 2014.
5. CRAM: Efficient Dynamic Resource Scheduling in cloud computing – IJERD –International Journal of Engineering Research and Department - ISBN: 2278-067X, Vol.10, No.3, pg. 59 - 62, 2014.

6. Network Intrusion Detection and countermeasures selection in virtual network systems –

- Sub Saharan journal of computer science – ISSN: 2307-9169, pg. 06-09, 2013.
7. Identification of speech disorders using Artificial Neural Networks - Sub Saharan journal Of computer science – ISSN: 2307-9169, Peer reviewed, pg. 01-05, 2013.
  8. Gender classification in speech recognition using fuzzy logic and neural network – International Arab Journal of Information Technology – ISSN: 2309 – 4524, Vol.10, No.5, 2013.
  9. Gender clusters and classification algorithms in speech processing: a comprehensive Performance Analysis – International journal of Computer Applications – Vol.51, No.20, pg. 9-17, 2012.
  10. Performance analysis of gender clustering and classification algorithms – International journal of Computer Science and Engineering – ISSN: 0975-3397, Vol. 4, No.3, pg. 442-457, 2012.
  11. Gender grouping in speech recognition using statistical metrics of pitch strength – International European journal of Scientific Research – ISSN:1450-216X, Vol.61, 524-537, 2011.
  12. Classification of speech signal based on gender a hybrid approach using Neuro Fuzzy systems – International Journal of speech technology, Peer reviewed , [www.springer.com/journal/10772](http://www.springer.com/journal/10772) , ISSN:10712 -011-9118-0, Vol.14, pg. 377-391, 2011.
  13. Intelligent separation of mixed speech signal using fourier spectra and back propagation Algorithm – International Journal of speech processing, Vol. 3, No.1, pg. 15-25, 2009.

### Conference/Seminar/Workshop Organized

Sl.No.	National/ State level	Conference Name	Date
1.	National Level Conference in St.Josephs College(Autonomous), Trichirapalli.	IARCS Theory of Concurrent Systems	27 <sup>th</sup> & 28 <sup>th</sup> August 2004
2.	National Level Seminar in Shrimathi Indira Gandhi College, Trichirapalli.	Emerging Trends of Mathematical Techniques and their applications in Computer Science	23 <sup>rd</sup> & 24 <sup>th</sup> February 2007
3.	National Level Conference in Shrimathi Indira Gandhi College, Trichirapalli	Bio informatic Tools for Gene and Protein Analysis	7 <sup>th</sup> & 8 <sup>th</sup> September 2007
4.	State Level Seminar in National	Research Directions in	22 <sup>nd</sup> December

	Institute of Technology, Trichirapalli	Information Technology and Applications	2006
5.	State Level Seminar in National Institute of Technology, Trichirapalli.	Mobile and Pervasive Computing	4 <sup>th</sup> August 2007
6.	State Level Seminar in Shrimathi Indira Gandhi College, Trichirapalli	Computer Oriented Mathematical Techniques	10 <sup>th</sup> & 11 <sup>th</sup> August 2007

1. Attended a Virtual Webinar on “DEFINE AND DESIGN YOUR DESTINY” conducted by Shrimati Indira Gandhi College on 20<sup>th</sup> January 2021.
2. Attended a Statewide Data Science Bootcamp on “1<sup>st</sup> STEP TOWARDS A CAREER IN DATA SCIENCE” conducted by INLustro from 1<sup>st</sup> March – 5<sup>th</sup> March 2021.
3. Attended Oneday National Seminar on “ILLUMINATING MASTERY OF BIG DATA, ANALYTICS & PYTHON” in virtual mode, organized by Department of Computer Science, Aiman College of Arts and Science for Women, Trichy-21 on 6<sup>th</sup> October 2021.
4. Completed the course “ Step into RPA” conducted by UIPath, Academic Alliance on 23/12/2021
5. Participated in the National Cyber Security Awareness Program organized by Department of Computer Applications, Bharathiyar University, Coimbatore-641 046 on 28<sup>th</sup> October 2021.
6. Participated in the Faculty Development Programme on “TABLEAU” in virtual mode, organized by the Department of Computer Science, Information Technology and Computer Applications, Shrimati Indira Gandhi College, Trichirappalli -02, from 14<sup>th</sup> June to 24<sup>th</sup> June 2022.
7. Completed Technical Proficiency Test organized by Inspire Softech Solutions, Chennai -59, in the month of December 2022
8. Participated in Celebration of Science Festival (Vigyan Utsav) under the theme of Science Communication & Popularisation conducted on 7<sup>th</sup> February 2022
9. Participated in One Week Online Faculty Development Programme on “ Communication System using Machine Learning Algorithms(CSMLA) organized by Department of Electronics & Communication Engineering, Annamacharya Institute of Technology and Science, Hyderabad during 14-19 March 2022
10. Participated in 5 hours of Faculty Development Program on Microsoft Azure AI Fundamentals (Online FDP) conducted by ICT Academy on 14<sup>th</sup> March to 16<sup>th</sup> March 2022.
11. Participated in One week Faculty Development Program organized by Department of Computer Science & Applications, Vivekananda Arts and Science College for Women, Sankagiri from 20-01-2025 to 25-01-2025