



SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4th Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution

Tiruchirappalli - 620 002

Name : **Dr.S.Rethinavalli**
Designation : Academic Director
Department : Computer Applications
Qualification : M.C.A., M.Phil., Ph.D.,
Experience : Teaching: 25 Research: 19
Area of Specialization(s) : Data Mining and Networking
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Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.,	COMPUTER SCIENCE	Shrimathi Indira Gandhi College, Bharathidasan University, Tiruchirappalli	2012–2018
M.Phil	COMPUTER SCIENCE	Bharathidasan University, Tiruchirappalli.	2004-2006
M.C.A.	COMPUTER SCIENCE	Shrimathi Indira Gandhi College, Bharathidasan University, Tiruchirappalli.	1997-2000
B.Sc.	PHYSICS	Shrimati Indira Gandhi College, Bharathidasan University, Tiruchirappalli.	1994-1997

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph.D	-	4

Research Publications (Indexed)

International

1. K. Meena, M. Manimekalai, S. Rethinavalli, “Correlation of Artificial Neural Network Classification and NFRS Attribute Filtering Algorithm for PCOS Data,” *International Journal of Research in Engineering and Technology*, Vol. 4, No. 3, pp. 519–524.
2. S. Rethinavalli, R. Gopinath, “Botnet Attack Detection in Internet of Things using Optimization Techniques,” *International Journal of Electrical Engineering and Technology (IJEET)*, Vol. 11.
3. K. Meena, M. Manimekalai, S. Rethinavalli, “A Novel Framework for Filtering the PCOS Attributes using Data Mining Techniques,” *International Journal of Engineering Research & Technology*, Vol. 4, No. 1, pp. 702–706.
4. S. Rethinavalli, R. Gopinath, “Classification Approach-Based Sybil Node Detection in Mobile Ad Hoc Networks,” *International Journal of Advanced Research in Engineering and Technology*.
5. S. Rethinavalli, M. Manimekalai, “A Hypothesis Analysis on the Proposed Methodology for Prediction of Polycystic Ovarian Syndrome,” *International Journal of Science, Engineering and Computer Technology*, Vol. 6, No. 11.
6. D.K. Meena, D.M. Manimekalai, S. Rethinavalli, “Implementing Neural Fuzzy Rough Set and Artificial Neural Network for Predicting PCOS,” *International Journal on Recent and Innovation Trends in Computing and Communication*.
7. S. Rethinavalli, K. Meena, M. Manimekalai, “A Literature Review on Polycystic Ovarian Syndrome and Data Mining Techniques,” *International Journal of Advanced Research in Computer Science and Software Engineering*.
8. S. Rethinavalli, R. Harini, “Utilizing AI for Volatility Prediction in the Share Market through a Corporate Analysis,” *Journal of Emerging Technologies and Innovation Research*, Vol. 12, No. 2, pp. c787–c791.

9. R. Saraswathy, S. Rethinavalli, M. Hemalatha, A. Kanimozhi, M. Vijay, "Snapshot of Present and Future Challenges for Security and Privacy in IoT," *Cuestiones de Fisioterapia*, Vol. 54, No. 2, pp. 677–692.
10. M. Hemalatha, R. Saraswathy, S. Rethinavalli, R. Devasakthi, G. Kalaivani, "Key Determinants of Veterinary Clinic Location: An Exploratory Study," *Cuestiones de Fisioterapia*, Vol. 54, No. 2, pp. 594–608.
11. A.J. Ayyakkannu Selvaraj, S. Rethinavalli, "An Application of Generative AI: Hybrid GAN-SMOTE Approach for Synthetic Data Generation and Classifier Evaluation on Breast Cancer Dataset," *Indian Journal of Natural Sciences (IJONS)*, Vol. 15, No. 83, pp. 72395–72400.
12. M. Kohila, S. Rethinavalli, "A Survey on Mutual Authentication and Key Agreement Scheme Combined with Migration Model for Peer-to-Peer Cloud," *International Journal of Advanced Research in Science and Technology*, Vol. 13, No. 3, pp. 1264–1267.
13. S. Rethinavalli, M. Uma Shankari, "A Survey on Deep Learning Applications in Cyber Security Ensuring Secure Data Maintenance," *International Journal of Research in Computer Applications and Robotics*, Vol. 11.
14. S. Rethinavalli, S. Manthandi Periannasamy, "An Analytical Approach of Sybil Attacks in Computational and Tele Networking," *AICTE Sponsored 7th International Conference on Signal Processing, Communications & System Design (ICSPCOMSD-2022)*, pp. 165–173, January 2022.
15. M. Manimekalai, S. Rethinavalli, "A Novel Hybrid Framework for Risk Severity of Polycystic Ovarian Syndrome," *International Journal of Control Theory and Applications (IJCTA)*, Vol. 9, No. 27, pp. 19–27.
16. S. Rethinavalli, K. Meena, M. Manimekalai, "An Unsupervised Technique for Statistical Data Analysis Using Data Mining," *International Journal of Information Sciences and Application*, Vol. 5, No. 1, pp. 11–20.
17. M. Uma Shankari, S. Rethinavalli, "Examining the Impact of User Behavior Analysis on Threat Detection."
18. S. Hareesh, S. Rethinavalli, "Deep Learning for Bone Fracture Detection: A Survey and Comparative Study."
19. M. Uma Shankari, S. Rethinavalli, "Published paper Titled 'Dynamic Duplication Attack Detection and Mitigation System (DDADMS)' on *Indian Journal of Science and Technology(IJST)*, Vol.18(18):1452-1464.

Book Publications

1. Dr.S.Rethinavalli, Ms.V.Manibabu, Ms.Vijiparthasarathy Published the book titled “**Artificial Intelligence and Expert System**” in the year 2024 by Ryan Publishers , highlighting foundational concepts, Core Concepts, Expert System and Real world application of AI. Published Date :14.12.2024 ISBN :9789334154542
2. Dr.S.Rethinavalli, M.Uma Shankari, S.Hareesh Published the book titled “**Artificial Intelligence and the Spectrum of its Applications**” in the year 2024 by Ryan Publishers. Published Date : 14.11.2024
3. Dr.S.Rethinavalli, Ms.R.Harini Published the book titled “**Basics of stock Market with AI**” in the year 2025 by DJ Publication, highlighting A Basic Introduction about Stock market and their prediction methods using AI. Published Date: 25.04.2025 ISBN: 978-93-48451-00-2 MSME No: UDYAM-RJ-02-0035821

Presentations in Conference

1. Presented and Published a paper “Framework for Detection of Sybil Attacks in mobile adhoc networks”, in International Technology, Entrepreneurship, Humanities and Sustainable value chain in a challenging environment organized by Gulf American University and Primax publication's, Dubai, ISSN No: 978-81-941390-4-1, March 2020.
2. Presented and Published a paper E-Commerce -A Case Study on PCOS System in International Conference organized by Primax Foundation and AArya Business College Singapore, Singapore 409957, ISSN No: 2394-2386, 4th June 2019

Participation in Conference

International:

1. Dr.S.Rethinavalli , Ms.R.Harini presented paper titled named "Utilizing AI for Volatility Prediction in the Share Market through a Corporate Analysis" on International Conference on Emerging Trends on Research Frontiers in Artificial Intelligence (ICETRF AI – 2025) on 08.01.2025 at Holy Cross College, Trichy.
2. Dr.S.Rethinavalli , Ms.R.Harini presented paper titled named "Utilizing AI for Volatility Prediction in the Share Market through a Corporate Analysis" on International Conference on Next Generation Technologies for Sustainable Computing (ICNGT– 2025) on 24.01.2025 at Shrimati Indira Gandhi college, Trichy.

3. Dr.S.Rethinavalli , Ms.R.Harini presented paper titled named "Utilizing AI for Volatility Prediction in the Share Market through a Corporate Analysis" on International Conference on Intelligent Computing System (ICICS – 2025) on 25.02.2025 at Bishop Heber College, Trichy.
4. Dr.S.Rethinavalli , Ms.R.Harini presented paper titled named "Utilizing AI for Volatility Prediction in the Share Market through a Corporate Analysis" on International Conference on Artificial Intelligence, Data Science and Cyber Security (ICAIDSCS – 2025) on 3rd and 4th April at Indra Ganesan College of Engineering, Manikandam, Trichy – 12.
5. Dr.S.Rethinavalli , Ms.R.Harini , Ms.M.Kohila presented paper titled named "Enhancing AI-Based Stock Market Volatility Prediction with Cybersecurity: A Firewall-Driven Approach" on International Conference on Artificial Intelligence, Data Science and Cyber Security (ICAIDSCS – 2025) on 3rd and 4th April at Indra Ganesan College of Engineering, Manikandam, Trichy – 12.
6. Participated and Presented the Paper Titled "Utilizing AI for volatility prediction in the share market through a corporate analysis" in the International conference on one-day International Conference on One-day International Conference on “Next Generation Technologies for Sustainable Computing - (ICNGT) 2025 organised by Department of Computer Applications (AICTE Approved), Shrimati Indira Gandhi College, Tiruchirappalli-2.
7. Participated First International conference on Intelligent Solutions for Emergency Responses and Disaster Management (ISERDM – 2023) Jointly organized by National Institute of Technology, Tiruchirappalli and C-DAC, Thiruvananthapuram during 9th to 11th January, 2023.

National: 7

1. Presented a paper in International Conference on Computing Communication and Information Science CCCIS'16, Bishop Heber College, Tiruchirappalli, Tamilnadu, India, July 2016,
2. Presented a paper on Heart Disease Prediction System using Hybrid Models of Data Mining Techniques at Shrimati Indira Gandhi College, Tiruchirappalli. India, on 19th September 2015.
3. Presented a paper on Recent Trends in Human Computer Interaction in Computer Society of India Tiruchirappalli Chapter at Shrimati Indira Gandhi College, Tiruchirappalli. India, on 28th February 2015.
4. Presented a paper National Seminar on Cloud Computing, at Bharathidasan University Technology Park, Tiruchirappalli. India, on 26th September 2012.
5. Presented a paper titled “Snapshot of Present and Future Challenges for Security and Privacy in IOT” National Seminar on Future Trends in AI and Digital Entrepreneurship organized by M.A.M Business School, Siruganur, Tiruchirappalli on 15th November 2024.
6. Presented a paper titled “Forensic Identification of Synthetic Faces using Convolutional Neural

Network”National Seminar on Future Trends in AI and Digital Entrepreneurship organized by M.A.M Business School, Siruganur, Tiruchirappalli on 15th November 2024.

7. Presented a paper titled “Key Determinants of Veterinary Clinic Location: An Exploratory Study”National Seminar on Future Trends in AI and Digital Entrepreneurship organized by M.A.M Business School, Siruganur, Tiruchirappalli on 15th November 2024.

Participation in Seminars

1. Dr.S.Rethinavalli participated in the National Seminar on “Big Data & Challenges” organized by School of Computer Science, Engineering & Applications, Bharathidasan University, Trichirappalli, held on 26th November 2022.

Participation in Workshop

1. Certificate of Participation in session 2 of skycampus-webnar on the theme leading in a VUCA world, ICT academy skycampus on Apr 20 -24, 2020
2. Organised and Co-ordinated State Level Seminar on Current Trends of in Research Field of Computer Science at Shrimati Indira Gandhi College, Tiruchirappalli. India, on Oct 13-14, 2007.
3. Organised and Co-ordinated State Level Seminar on Computer Oriented Mathematical Techniques 2007 at Shrimati Indira Gandhi College, Tiruchirappalli, India, on Aug 10-11, 2007.
4. Organised and Co-ordinated National Seminar on Emerging Trends of Mathematical Techniques and Their Applications in Computer Science at Shrimati Indira Gandhi College, Tiruchirappalli, India, on Feb 23 & 24, 2007.
5. Organised and Co-ordinated State Level Seminar on current Trends of in Research Field of Computer Science at Shrimati Indira Gandhi College, Trichy, India, on Oct 13-14, 2006.
6. Attended state level conference on currents trends in Research field of computer science organized by the research department of computer science, Shrimati Indira Gandhi College, Tiruchirappalli, and Computer Society of India.
7. Attended University Grant Commission sponsored seminar on Recent Trends in Information Technology Organized by the PG research Department of Computer Science Gobi Arts and Science College, India.

Participation in Orientation Programme / Short Term Courses

1. Dr.S.Rethinavalli participated in the NEP 2020 Orientation & sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission, organized by UGC-MMTC , Bharathidasan University, Tiruchirappalli, Tamilnadu from

19.02.2024 to 28.02.2024.

2. Dr.S.Rethinavalli participated in the Entrepreneurship Summit – SheShines- “Find your voice and inspire others to find theirs” organized by the Department of Management Studies on 8th & 9th February, 2024.

Participation in Faculty Development Programme

1. Faculty development program in ‘Building Emotional Intelligence and Resilience Case Method of Experiential Teaching and Learning, Mahatma Gandhi National Council of Rural Education (MHRD, Govn’t of India), May 8-14, 2021.
2. Dr.S.Rethinavalli participated in the Seven Days Faculty Development Programme on “Understanding outcome Based Education” from 10.06.2024 to 15.06.2024 and 18.06.2024 organized by Internal Quality Assurance Cell of Shrimati Indira Gandhi College, Tiruchirapali.
3. National level virtual Faculty development program in “Aligning with the new educational Era”, Primax foundation , February 21-26, 2022.

Conference / Seminar / Workshop Organized - 2

Invited Speaker / Session Chair- Conference / Seminar / Workshop - 1

Member in BoS - 1

Editorial / Review Board Member - 1

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
BoS Member	BDU	5 Years
National Service Scheme Programme Officer	Shrimari Indira Gandhi College, Trichy.	2004 – 2006
Youth Red Cross Programme Officer	Shrimari Indira Gandhi College, Trichy.	2002 – 2004
Examiner Under graduate hands-on and scheme examinations	Bharathidasan University	
Institution Innovation Council – Innovation Ambassador	Shrimari Indira Gandhi College, Trichy.	2022- Present
Question Paper Setter and Valuator	Bharathidasan, Bharathiyar, Periyar, Alagappa and Manonmaniam Sundaranar Universities	

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Best Researcher Award	Global Mc Stem University	2024