



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.Hemalatha
Designation : Assistant Professor
Department : PG and Reseach Department of Computer Science
Qualification : M.Sc.,M.Phil.Ph.D.,
Experience : Teaching:32 Research:20
Area of Specialization(s) : Networking
Email (Official ID) : hemalathas@sigc.edu
Aadhar Number : 9827 4077 1193

Academic Qualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D	Computer Science	Bharathidasan University-TRICHIRAPALLI	January 2020
M.Sc	Computer Science	Seethalakshmi Ramaswamy College- TRICHIRAPALLI	April 1991
B.Sc	Computer Science	Cauvery College - TRICHIRAPALLI	April 1989

Research Guidance

Programme	No.of Scholars	
	Completed	Pursuing
M.PHIL COMPUTER SCIENCE	95	-

Research Publications (Indexed)

International

1. S. HEMALATHA, "Secure Data Aggregation Using Efficient Key Management Techniques in Wireless Sensor Network", International Journal of Advanced Technology in Engineering and Science. ISSN: Volume III, Special Issue No. 01, PP 414-424, November 2015
2. S. HEMALATHA "Timely and Secure Data Transmission in Disruption Tolerant Networks" International Journal of Scientific Progress and Research ISSN: 2349-4689. Volume II, Issue No. 03, May 2015
3. S. HEMALATHA, "An Efficient Privacy Preserving for Mobile and Pervasive Computing" International Journal of Engineering and Science Invention ISSN: 2319-6734, Volume IV, Issue No. 6, June 2015.
4. S. HEMALATHA, S. SARANYA, "Energy Efficient Sleep Scheduling Based on Moving Directions in Target Tracking Sensor Networks" International Journal of Research Science and Engineering. ISSN: 2212 – 4012, Volume III, Issue No. 6, June 2016.
5. S. HEMALATHA, "High Energy Efficient Target Tracking and Maximal Throughput in Wireless Sensor Networks" International Journal of Advance Research in Science and Engineering. ISSN: 2319 8354, Volume V, Issue on 01, January 2016.
6. S. HEMALATHA, "Unicast Delivery Delay Study for MANET with Erasure Coding and F-Cast Relay" International Journal of Computer Science and Engineering Technology. ISSN: 2231 – 0711, Volume VI, Issue No. 6, June 2016.
7. S. HEMALATHA, "Enhancing Three – Hop Routing Protocol to Raise the High Throughput and Reducing Packet Delay Using Wireless Sensor Networks" International Research Journal of Engineering and Technology, ISSN: 2395–0026, Volume III, Issue No. 07, July 2016.
8. Dr. S. Hemalatha "SECURE AND ENERGY-EFFICIENT DISJOINT MULTIPATH ROUTING" International Journal of Research and Analytical Reviews (IJRAR) (www.ijrar.org) UGC Approved (Journal No: 43602) & 5.75 Impact Factor Volume 7 Issue 2, Date of Publication: June 2020.
9. Dr. S. Hemalatha S. HEMALATHA "Data mining and fusion techniques for wireless intelligent sensor networks" International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 08 Issue: 12 | Dec 2021 www.irjet.net
p-ISSN: 2395-0072

Book Publications :

- Fundamentals of computer networks

Patent published :

- TITLE OF INVENTION Wearable Nanotechnology-Enabled Biosensor for Real-Time Health Monitoring and Analysis
FIELD OF INVENTION BIO-MEDICAL ENGINEERING

Presentations in Conference

- presented a paper entitled SECURE DATA AGGREGATION USING EFFICIENT KEY MANAGEMENT TECHNIQUE IN WIRELESS SENSOR NETWORK on the International conference on Technology for Sustainability-Engineering, Information Technology, Management and the Environment held at DAV Institute of Management, Faridabad on 28th November 2015
- presented a paper entitled HIGH ENERGY EFFICIENT TARGET TRACKING AND MAXIMAL THROUGHPUT IN WIRELESS SENSOR NETWORK on the 3rd International conference on Science, Technology and Management held at India International Center, New Delhi on 17th January 2016
- presented a paper entitled “CURRENT TRENDS IN WIRELESS SENSOR NETWORK SECURITY ATTACKS AND ITS REMEDIES” in the One Day International Conference on “RECENT TRENDS IN CYBER SECURITY” in virtual mode on 15th December 2021 organized by the Department of Computer Science, Information Technology and Computer Applications, Shrimati Indira Gandhi College, Tiruchirappalli-620 002, Tamil Nadu, India.
- Presented Paper on the title “**Next Generation Networking with Artificial Intelligence: Optimizing Energy Efficiency in Internet of Things Networks using Hybrid Leach Protocol**” in One day International Conference on Trends in Artificial Intelligence held on 20.9.24 at Shrimati Indira Gandhi College, Trichy-2.

Participation in Conference

International:

1. Participated the conference on SECURE DATA AGGREGATION USING EFFICIENT KEY MANAGEMENT TECHNIQUE IN WIRELESS SENSOR NETWORK on the International conference on Technology for Sustainability-Engineering, Information Technology, Management and the Environment held at DAV Institute of Management, Faridabad on 28th November 2015.
2. Participated the conference on HIGH ENERGY EFFICIENT TARGET TRACKING AND

MAXIMAL THROUGHPUT IN WIRELESS SENSOR NETWORK on the 3rd International conference on Science, Technology and Management held at India International Center, New Delhi on 17th January 2016.

3. Attended an International Conference on "**RECENT TRENDS IN CYBER SURITY**" conducted by Shrimati Indira Gandhi College, Trichy on 15th December 2021.
4. One day International Conference on Trends in Artificial Intelligence held on 20.9.24 at Shrimati Indira Gandhi College, Trichy-2.

National:

Participation in Seminars

- Participated in Regional level Conference on I3–Industries institutions Interactions 6th and 7th January 2005.
- Participated in National Conference on Bioinformatic Tools for Gene and Protein Analysis at Shrimati Indira Gandhi College, Tiruchirappalli-2 during 7th & 8th September 2007.
- State Level Seminar on Computer oriented mathematical Techniques 2007 (SLSCOMT-2007) at Shrimati Indira Gandhi College, Tiruchirappalli-2 during 10th & 11th August 2007.
- Participated in Regional conference on “Information Communication Technology–Trends”, Organized by Shrimathi Indira Gandhi College, Trichy on 21th November 2009.
- Participated in the National Conference on “SOFTWARE AND COMPUTING TECHNOLOGIES” jointly organized by BUTP, SIGC, Trichy and Computer Society of India, Trichy Chapter, CSI-WOMEN Students Branch of SIGC on 19th September 2012.
- Participated in the National level seminar on “HIGH PERFORMANCE COMPUTING”, organized by Shrimathi Indira Gandhi College, Trichy 23rd Feb 2012
- Participated in the National Seminar on “CLOUD COMPUTING” jointly organized by BUTP, SIGC, Trichy and Computer Society of India, Trichy Chapter on 26th & 27th September 2012.
- Participated in the National Level Workshop on “RECENT TRENDS IN HUMAN COMPUTER INTERACTION” organized by Computer Society of India, Trichy Chapter in association with CSI student Branch of MAM College, CSI student Branch of JMC, CSI student Branch of SIGC and Department of computer science of Saranathan college of engineering”, Tiruchirappalli on 28th February 2015.
- Attended Webinar on Reinforcement Learning on 09.04.2021. 13 Attended a 6 days National

Level Faculty Development Programme on “Data Science and Big Data Analytics”; organized by School of Computer Science, PPG College of Arts and Science, Coimbatore from 25.08.2021 to 31.08.2021.

- Attended National Level webinar on “IoT Communication Protocols” on 15.09.2021 organized by Department of ECE, Nehru Institute of Engineering and Technology, Coimbatore. Participated 12 hours of FDP on “Cybersecurity Infrastructure Configuration (Online Live FDP) conducted by ICT Academy on 20.09.2021 to 24.09.2021.
- Participated in IP Awareness Training program under “National Intellectual Property 1 Awareness Mission “ on 26.04.2023.

Participation in Orientation Programme /Short Term Courses

- Participated in the Refresher Course in Computer Science conducted by UGC–Academic Staff College, Bharathidasan University, Tiruchirappalli on November 2004.

Participation in Faculty Development Programme

- Attended a Six Day National Level Virtual Faculty Enrichment Program conducted by Primax Foundation on “Aligning With The New Educational ERA from 21.02.2022 to 26.02.2022.
- Participated 8 hours of FDP on “Microsoft Azure AI Fundamentals”(Online Live FDP) conducted by ICT Academy on 28.02.2022 to 07.03.2022.
- Faculty Development Programme on “TABLEAU” in virtual mode from 14th June to 24th June 2022.
- Participated in the Seven Days Faculty Development Programme on “Understanding Outcome Based Education” from 10.06.2024 to 15.06.2024 & 18.06.2024 organized by Internal Quality Assurance Cell of Shrimati Indira Gandhi College, Tiruchirappalli
- Faculty Development Programme on “TABLEAU” in virtual mode from 14th June to 24th June 2022.
- Participated in the Six Days Faculty Development Programme on “Redefining Research Skills: Enriching Research and publications from 1.4.2024 to 5.4.24 .
- Malaviya Mission Teacher Training Programme of UGC NEP 2020 Orientation & Sensitization Programme organized by Bharathidasan University from 19.2.2024 to 28.2.2024.

Memberin BoS

- Board of studies member in PG Computer Science, Bharathidasan University from 2022 to 2025
- Board of studies member in PG ,Centre for Distance Education , Bharathidasan University,Trichirapalli. 202024 to 2027

Awards/ Honors

Awards/ Honors	Agency/ Institute	Year of Award
Distinguished service award given by SHRIMATI INDIRA GANDHI COLLEGE TRICHIRAPALLI	SHRIMATI INDIRA GANDHI COLLEGE TRICHIRAPALLI	MARCH 2025