Name: Dr. D. Devi Aruna

Designation: Associate Professor

Department: Computer Applications

Qualification: M.C.A., Ph. D.

Experience:

Teaching: 10.5 Years Industry: - Research: 3 Years

Area of Specialization(s): Network Security, Data Mining

Email (Official ID): drdeviaruna@drngpasc.ac.in

Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	Avinashilingam University, Coimbatore	2015
M. C. A.	Computer Applications	Avinashilingam University, Coimbatore	2008
B. Sc.	Chemistry/Physics	Avinashilingam University, Coimbatore	2005

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
NPTEL	Cloud Computing	IIT Kanpur	2017
NPTEL	IOT	IIT Kanpur	2019

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	2	2

M. Phil.	-	-

Research Publications (Indexed)

International:

1. Dr.D.Devi Aruna, "CLBEOR: CLUSTER BASED LOAD BALANCING ENERGY-AWARE OPTIMIZED ROUTING ALOGIRTHM WITH ENERGETIC ROUTING OPTIMIZATION TECHNIQUE IN WIRELESS SENSOR NETWORK",International Journal of Aquatic Science, Volume - 12, Issue 02, July 2021, ISSN: 2008-8019(Indexed in Web of Science).

2. Dr.D.Devi Aruna, "ROBUST OPTIMIZATION OD ELECTROENCEPHALOGRAPH SIGNALS FOR EPILEPSY SEIZURE PREDICTION BY UTILIZING VSPO GENETIC ALGORITHMS WITH SVM AND MACHINE LEARNING METHODS", Indian Journal of Science and technology, Volume-14,Issue- 16, April 2021,ISSN-0974-6846(Indexed in Web of Science).

3. *Dr.D.DeviAruna,""ENERGETIC ROUTING TECHNIQUE BASED KERNEL FUZZY LATENCY PARTICLE SWARM OPTIMIZATION ALGORITHM IN WIRELESS SENSOR NETWORK",International Journal of Recent Technology and Engineering, Vol-8, Issue-6, pp.1196-1201, March 2020, ISSN-2277-3878. (Indexed in Scopus).*

4. Dr.D.DeviAruna, "A HYBRID DETECTION MODEL FOR EPILEPSY SEIZURE USING FCM WITH MPSO AND DECISION TREE", International Journal of Recent Technology and Engineering, Vol-8, Issue-6, pp. 2670-2675, March 2020, ISSN-2277-3878. (Indexed in Scopus).

5. Dr.D.DeviAruna," ENERGETIC ROUTING TECHNIQUE USING LATENCY WISE PROMOTE NODE SELECTION ALGORITHM IN WSN", Journal of Emerging Technologies and Innovative Research (JETIR), Vol- 6, Issue- 2, Feb- 2019, ISSN-2349-5162(Indexed in UGC).

6. Dr.D.Devi Aruna,"K-MODES AND FUZZY C-MEANS WITH MODIFIED PARTICLE SWAM OPTIMIZATION CLUSTERING ALGORITHM FOR EPILEPSY SEIZURE DATA"

International Journal of Computer Sciences and Engineering, Vol-7, Issue-1, PP.73-77, Jan 2019 ISSN:2229-5631,(Indexed in UGC)

7. Dr. D. Devi Aruna,"SIMULATION AND ANALYSIS OF LAYERWISE SECURITY IN MOBILE ADHOC NETWORK FOR MILITARY SCENARIO",International Journal of Engineering and technology,Vol.6, No. 4, pp.8-15, August 2016, ISSN:2250-3498, (Indexed in Google Scholar).

8. Dr. D. Devi Aruna&Dr.P.Subashini, "SECURING PHYSICAL AND NETWORK LAYER USING SNAUTH-SPMAODV WITH DSSS FOR MOBILE ADHOC NETWORKS IN MILITARY SCENARIO",International Journal of Electronics and Computer Science Engineering,Vol.1,No .3,pp.1840-1849,Febraury 2012,ISSN:2277-1956, (Indexed in Google Scholar).

9. Dr.D.DeviAruna&Dr.P.Subashini, " SNAUTH-SPMAODV: SECURE NEIGHBOR AUTHENTICATION STRICT PRIORITY MULTICAST AODV AGAINST DENIAL OF SERVICE ATTACK FOR MANET IN MILITARY SCENARIO", International Journal of Computer Application, Vol. 48, No. 4, pp.1-6,January 2012, ISSN: 0975 – 8887, (Indexed in Google Scholar).

10. Dr.D.DeviAruna&Dr.P.Subashini, "CCMP-AES MODEL WITH SNAUTH-SPMAODV ROUTING PROTOCOL TO SECURE LINK AND NETWORK LAYER FOR MOBILE ADHOC NETWORKS IN MILITARY SCENARIO", International Journal of Engineering and Advanced Technology , Vol.1, Issue.4, pp.230-236, February 2012, ISSN: 2249 – 8958,(Indexed in Google Scholar).

11. Dr. G. Padmavathi,Dr.P.Subashini&Dr.D.DeviAruna, " ANODR-ECC KEY MANAGEMENT PROTOCOL WITH TELNET TO SECURE APPLICATION AND NETWORK LAYER FOR MOBILE ADHOC NETWORKS", International Journal of Distributed and Parallel Systems ,Vol.3, No.1,pp.331-339, January 2012, ISSN: 0976 – 9757,(Indexed in Google Scholar).

12. Dr. G. Padmavathi, Dr.P.Subashini&Dr.D.DeviAruna,"ZRP WITH WTLS KEY MANAGEMENT TECHNIQUE TO SECURE TRANSPORT AND NETWORK LAYERS IN MOBILE ADHOC NETWORKS" ,International Journal of Wireless & Mobile Networks ,Vol. 4, No.1, pp.129-138, February 2012, ISSN: 0975-3834,(Indexed in Google Scholar).

13. Dr. G. Padmavathi, Dr.P.Subashini&Dr.D.DeviAruna, "DSSS WITH ISAKMP KEY MANAGEMENT PROTOCOL TO SECURE PHYSICAL LAYER FOR MOBILE ADHOC NETWORK", International Journal of Network Security & Its Applications,Vol. 4, No.1, pp .69-76,January 2012,ISSN ISSN: 0974 – 9330,(Indexed in Google Scholar).

14. Dr. G. Padmavathi, Dr.P.Subashini&Dr.D.DeviAruna, " CCMP-AES MODEL WITH DSR ROUTING PROTOCOL TO SECURE LINK LAYER AND NETWORK LAYER IN MOBILE ADHOC NETWORKS", International Journal on Computer Science and Engineering,Vol.2,No.5, pp.20-30 2010,ISSN 1524-1531,(Indexed in Google Scholar).

15. Dr. G. Padmavathi, Dr.P.Subashini&Dr.D.DeviAruna, " IMPACT OF WORMHOLE ATTACKS AND PERFORMANCE STUDY OF DIFFERENT ROUTING PROTOCOLS IN MOBILE AD HOC NETWORKS", International Journal of Information Assurance and Security, Vol. 5,Issue. 1,pp.2010, ISSN 1554-1010,(Indexed in Google Scholar).

16. Dr. G. Padmavathi, Dr.P.Subashini&Dr.D.DeviAruna, "AN EVALUATION OF SUITABLE KEY MANAGEMENT SCHEMES IN MOBILE ADHOC NETWORKS",InternationalJournal of Networking and Communication Engineering,Vol. 1,No. 5, pp.188-192, August 2009,ISSN 0974 – 9713,(Indexed in Google Scholar).

Other Publications: International / National Journals

1. C.V. Banupriya& Dr. D. Devi Aruna, "A SURVEY ON DIFFERENT TECHNIQUES FOR SEIZURES DETECTION IN EEG",International Journal for Research in Applied Science &Engineering Technology,Vol.6 Issue.1,pp.1970-1975, January 2018,ISSN:2321-9653.

2. P.Jennifer & Dr. D. Devi Aruna, "COMPARISON OF VARIOUS IMAGE EDGE DETECTION TECHNIQUES FOR BRAIN TUMOR DETECTION", International journal of scientific research

in computer science engineering and information technology, Vol.2, Issue.1, pp.231-235, February 2017 ISSN: 2456-3307.

3. E.Kanchana Devi &Dr.D. Devi Aruna, "BRAIN TUMOR IMAGE SEGMENTATION USING K-MEANS CLUSTERING ALGORITHM", International journal of scientific research in computer science engineering and information technology, Vol. 2,Issue.1,pp.209-213,February 2017,ISSN:2456-3307.

4. Dr. D. Devi Aruna, "A SURVEY ON DIFFERENT DISEASE AND IMAGE PROCESSING TECHNIQUES IN SUGARCANE CROPS", International Journal of Scientific research and development Vol.3,Issue.11,pp.323-325,January 2016, ISSN:2321-0613.

5. Dr. D. Devi Aruna ,"LAYERWISE SECURITY FRAMEWORK WITH SNAUTH-SPMAODV TO DEFEND DENIAL OF SERVICE ATTACK IN MOBILE ADHOC NETWORKS FOR HOSTILE ENVIRONMENT" ,International Journal of Innovative Research in Science & Engineering , Vol.2 Issue. 4, April 2014 ISSN: 2347-3207.

6. Dr.D.DeviAruna&Dr.P.Subashini, " ANALYSIS OF DIFFERENT PROPAGATION MODEL FOR IPSEC-LANMAR ROUTING PROTOCOL TO SECURE NETWORK LAYER FOR MANET IN EMERGENCY AREA ENVIRONMENT", International Journal on Computer Science and Technology, Vol. 2, Issue .4, pp.295-298, Dec. 2011, ISSN : 0976-8491.

7. Dr.D.DeviAruna&Dr.P.Subashini, " SECURING TRANSPORT AND NETWORK LAYER USING SNAUTH- SPMAODV WITH WTLS IN MOBILE ADHOC NETWORKS FOR MILITARY SCENARIO", International Journal of Computer Networks and Wireless Communications (IJCNWC), Vol.2, No.2, pp.262-269,March 2012, ISSN: 2250-3501.

8. Dr.D.DeviAruna&Dr.P.Subashini, "SNAUTH-SPMAODV WITH SIP TO SECURE APPLICATION AND NETWORK LAYER IN MOBILE ADHOC NETWORK FOR MILITARY SCENARIO", International Journal of Computer Science and Information Technology & Security, Vol. 2, No.2,pp.446-454, April 2012 ,ISSN: 2249-9555

9. Dr.D.DeviAruna&Dr.P.Subashini , "DSSS WITH ISAKMP KEY MANAGEMENT PROTOCOL TO SECURE PHYSICAL LAYER FOR MOBILE ADHOC NETWORK",International Journal of Network Security & Its Applications ,Vol.4, No.1,January 2012, pg.69-76,ISSN 0975 – 2307.

10. Dr.D.DeviAruna&Dr.P.Subashini, "SNAUTH-SPMAODV WITH IPSEC TO SECURE NETWORK LAYER FOR MOBILE ADHOC NETWORKS IN MILITARY SCENARIO", International Journal of Engineering Research and Technology, Vol.1 ,Issue 5,pp.1-8, July - 2012 ISSN: 2278-0181

Presentations in Conference

1. Current Network Management And Protection Within Big Enterprise Network, National Conference on Advanced Computing Sciences, Dr.N.G.P. Arts and Science College,16-Mar-23.

2. Early Detection of Lung Cancer and Tuberculosis Using X-Ray Image Analysis, International Conference on Machine Learning and Neural Information Systems, SriVidya Mandir Arts and Science College, Krishnagiri 18-Mar-21 to 19-Mar-21.

3. Security Issues in   IOT: A Survey, International Conference on Advances in IOT, High Performance in Edge Computing, 14-Oct-20 to 18-Oct-20.

4. Epilepsy Seizure Detection in EEG Signal using K-Modes Clustering Technique, Second International Conference on Research trends in Computing Technologies, 28.Feb-20and 29-Feb-20.

5. International Conference on HealthCare Technology and Management, Vivenandha College of Arts and Science for Women,4-Feb-19 to 5-Feb-19

6. TYPE 2 DIABETES CLASSIFICATION BASED ON DATA MINING TECHNIQUES,International Conference on Research Trends in computing technologies,Dr.N.G.P Arts and Science College,Coimbatore,9-Aug-18 to 10-Aug-18

7. Energetic routing technique using latency wise promote node selection algorithm in WSN,International Conference on Research Trends in computing technologies,Dr.N.G.P Arts and Science College ,Coimbatore,9-Aug-2018 to 10-Aug-18

8. SOCIAL MEDIA MINING USING KONSTANZ INFORMATION MINER, National Conference on Emerging Trends in Big Data Technologies and Research Issues, Dr. N.G.P Arts and Science College ,Coimbatore, 24-Feb-17.

9. ELECTROCARDIOGRAM BEAT CLASSFICICATION USING MACHINE LEARNING TECHNIQUES ,National Conference on Emerging Trends in Big Data Technologies and Research Issues , Dr. N.G.P Arts and Science College,Coimbatore, 24-Feb-17.

10. MOBILE AD-HOC NETWORKS: CASE STUDIES, National Conference at PSGR Krishnammal College for Women on 5-Feb-16.

11. LANMAR WITH IPSEC TO SECURE NETWORK LAYER FOR MOBILE ADHOC NETWORKS, National Conference on Advanced Computing technologies, Avinashilingam University for Women, Coimbatore, 19-Feb-10

12. A ROBUST KEY MANAGEMENT SCHEME FOR WORMHOLE ATTACKS IN MOBILE ADHOC NETWORKS, International conference on computing, ICC 2010, New Delhi, Eshwar publication,01-Dec-10.

13. HYBRID ROUTING PROTOCOLS TO SECURE NETWORK LAYER FOR MOBILE AD HOC NETWORKS, IEEE International Conference in Computational intelligence and Computing research, Tamilnadu College of Engineering ,Coimbatore,10-Dec-10.

14. COMPARISON OF ROUTING PROTOCOLS OLSR AND ZRP WITH IPSEC TO SECURE NETWORK LAYER FOR MOBILE ADHOC NETWORKS ,National Conference on Network security and information Retrieval, Avinashilingam University for Women, Coimbatore ,14-Dec-09.

15. CLASSIFICATION OF ATTACKS AND SECURITY MECHANISM IN MOBILE ADHOC NETWORK, National Level Conference on signal Systems and communication, SKR engineering college, Chennai, 22-Aug-08.

16. A SURVEY OF KEY MANAGEMENT SCHEMES IN MOBILE AD HOC NETWORKS, National Conference on Advanced Computing , DJ Academy for managerial excellence ,Coimbatore,19-Sep-08.

Participation in Seminars

1. Seminar on Neural Network and deep Learning,Sri Ramakrsihna College of Arts and Science,16-05-21.
2. Online Seminar on Python 3.4.3,Pimpri Chinchwad college of Engineering and Research,20-Apr-21 to 25-Apr-21.
3. Importance of Human Values in the Present Scenario,ST.Paul's College of Arts and Science for Women,11-Dec-18.
4. Analysis of signal and image processing techniques for diagnosis of neuro and cardiac abnormalities,KonguEngineerningcollege, 16-Oct-15 to 17-Oct-15.

Participation in Workshop

1. One day workshop on Outcome Base Education(OBE), Dr.N.G.P Arts and Science College & ipsr solutions limited,04-Mar-23
2. Workshop on Author Academy be a Scientist, Nature Research Academies,12-Jan-21.
3. Research Methodologies and Techniques,Avinashilingam University for Women,Coimbatore,18-Jul-08 to 19-Jul-08.
4. Matlab for Solving Research Problems, Dr.N.G.P Arts and Science College, Coimbatore,31-Jul-17.
5. Data Vizualization with Tableau, Dr.N.G.P Arts and Science College, Coimbatore,07-Aug-17 to 8-Aug-17.
6. Python Programming ,Dr.N.G.P Arts and Science College, Coimbatore,15-Sep-17.

Participation in Faculty Development Programme

1. One Week Online International FDP on Next Generation Computing : Key Trends, Challenges and Opportunities organized by the Department of Computer Science & Applications (MCA), SRM Institute of Science & Technology, Ramapuram Campus from 18-04-2022 to 23-04-2022.

2. FDP on "Framework for Internet of Things (IoT) Applications",Center forInternet of Things (IoT), Dr. N.G.P. Arts and Science College, Coimbatore,September 21-24 & 28-30, 2021

3. Online FDP on "Research Methodology and Pedagogy for Tertiary Education",Dr.N.G.P. Arts and Science,15-Jun-21 to 21-Jun-21.

4. Seven Day Faculty Development Programme on NAAC Revised Accreditation Framework and OBEAssessment Methodology, Dr.N.G.P. Arts and Science College, 27-May-19 to 02-Jun-19.

5. FDP on EMOTIONAL INTELLIGENCE, KG College of Arts and Science, Coimbatore, 20-Apr-21 to 02-May-21.

6. Linux and open source tools, Kumaraguru college of Technology ,Coimbatore, 27-Jan-14 to 29-Jan-14.

7. Quality measures in higher education, Dr.N.G.PArts and Science College,Coimbatore,3-Dec-2018 to 9-Dec-2018.

Patent Publication

- A Novel Approach for providing security in IoT based on Quantum Computing, IndianPatent Office, June 2022
- A Deep Learning Model to predict the placement of sensors in IOT, IndianPatent Office, July 2022

Book Publication

- Analysis of Fake Reviews and User Access Denial,AETS Global Publisher,2023

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
IAENG	Life-time	-