**Name: Dr. Poorana Senthilkumar S**

**Designation:** Assistant Professor and Head

**Department:** Computer Applications

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

**Experience:**

Teaching: 15.7 Years    Industry: 1 Year    Research: 7 Years

**Area of Specialization(s):** Internet of Things, Mobile Computing, Wireless sensor Network, VANET, Artificial Intelligence, Machine Learning.

**Email (Official ID):**pooranasenthilkumar@drngpasc.ac.in

## Academic Qualifications

| Degree | Branch | Institution / University Name | Year of Graduation |
|--------|--------|-------------------------------|--------------------|
| Ph.D. | Computer Science | Bharathiar University, Coimbatore | 2023 |
| M.Phil. | Computer Science | Vinayaka Mission University, Salem | 2009 |
| M. C. A | Computer Applications | SSM College of Engineering, Komarapalayam | 2008 |
| B. Sc | Computer Science | Bharathidasan College of Arts and Science, Erode | 2004 |

## Additional Qualifications

| Diploma / Vocational / Certification | Area of Specialization | Institution / University / Agency Name | Year |
|--------------------------------------|------------------------|----------------------------------------|------|
| NPTEL | C Programming | IIT Kanpur | 2017 |
| SWAYAM | ANNUAL REFRESHER PROGRAMME IN TEACHING (ARPIT) - March 2019,Latest Trends in Pedagogy and Assessment | IIT Kanpur | 2019 |

**International**

1. Poorana senthilkkumar S "Performance Evaluation of Predicting IoT Malicious Nodes Using Machine Learning Classification Algorithms" Published in International Journal of Computational and Experimental Science and Engineering, Online ISSN 2149-9144, Volume 10, Issue no 3, pp 341-349, August 2024, DOI: 10.22399/ijcesen.395. (Scopus Indexed).

2. Poorana senthilkumar S "Additively Composite Model Objective Function for Routing Protocol for Low-Power and Lossy Network Protocol" Published in International Journal of Performability Engineering, Online ISSN 2993-8341, Print ISSN 0973-1318, Volume 20, Issue no 5, pp 300-311, May 2024, DOI: 10.23940/ijpe.24.05. (Scopus Indexed).

3. Poorana Senthilkumar S "Artificial Intelligence and Internet of Things Integration Taxonomy" published in International Journal of Research Publication and Reviews, ISSN 2582-7421, Volume 5, Issue no 4, pp 6119-6124 April 2024. DOI: https://doi.org/10.55248/gengpi.5.0424.1082. (Peer reviewed)

4. Poorana senthilkumar S "A Simplify Detection of Covid - 19 stages used Modified Deep Learning Algorithm", published in Tuijin Jishu/Journal of Propulsion Technology, ISSN: 1001-4055 Volume 44. Issue 6, Dec 2023. (Scopus Indexed).

5. Poorana Senthilkumar S "Weighted Sum Metrics – Based Load Balancing RPL Objective Function for IoT", published in Annals of Emerging Technologies in Computing (AETiC), Print ISSN: 2516-0281 Online ISSN: 2516-029X, Volume 7, Issue 2, April 2023, (Scopus Indexed).

6. Poorana Senthilkumar S "Internet of Things In Low- Power Wide Area Network And Short Range Network: A Review", published in i-manager's Journal on Computer Science (JCOM), Volume 10, Issue 4, January March 2023, (Peer Reviewed).

7. S.PooranaSenthilKumar and Dr.B.Subramani, "RPL Protocol Load balancing Schemes in Low-Power and Lossy Networks" published in International Journal of Scientific Research in Computer Science and Engineering (ISROSET) E-ISSN: 2320-7639 Volume: 11 Issue:01, February 2023 – Available at https://www.isroset.org/pdf_paper_view.php?paper_id=3045&2-ISROSET-IJSRCSE-08512.pdf (Peer Reviewed)

8. S.PooranaSenthilKumar and Dr.B.Subramani, "RPL Protocol Limitations, and Open Challenges in Internet of Things: A Review" Published in International Journal of Advanced Research in Computer and Communication Engineering ISSN (O) 2278-1021, ISSN (P) 2319-5940, Volume. 12, Issue 1, January 2023 – Available at https://ijarcce.com/issues/volume-12-issue-1-january-2023/ (Peer – Reviewed)

9. S.PooranaSenthilKumar and Dr.B.Subramani, "RPL PROTOCOL INFLUENCE IN IOT APPLICATIONS" Published in International Research Journal of Modernization in Engineering Technology and Science(IRJMETS) e-ISSN: 2582-5208, Volume: 05 Issue:01, January 2023 – Available at https://www.irjmets.com/pastvolumeissue.php?page=5&p=56 (Peer Reviewed)

10. S.PooranaSenthilKumar and Dr.B.Subramani, "Enhanced Objective Function ETX Metric in Routing Protocol for Low-Power and Lossy Networks (RPL)", Published in International Journal of Computer Networks and Applications (IJCNA), ISSN: 2395-0455 Volume 9, Issue 4, July – August 2022 – Available at https://www.ijcna.org/issues.php?vol=9&issue=4 (Indexed in Scopus)

11. S.PooranaSenthilKumar and Dr.B.Subramani,, "Evolutions of Low Power and Lossy Networks Protocols in the Internet of Things: A Review" Published in International Journal of Information

Technology and Electrical Engineering (ITEE) ISSN: 2306-708X Volume 11, Issue 3 June 2022-Available at http://www.iteejournal.org/Archive_june_2022.php (Indexed in UGC)

12. S.PooranaSenthilKumar, "IoT Applications Challenges Privacy and Security"International Journal of Research in Engineering and Science (IJRES),Vol- 9 Issue-3 2021 PP. 36-39,ISSN : 2320-9356 (Indexed in UGC).

13. S.PooranaSenthilKumar and Dr.B.Subramani, "Study on IoT Architecture, Application Protocol and Energy needs" Published in International Journal of Scientific Research in Network Security and Communication IJSRNSC) E-ISSN:2321-3256 - Volume-8, Issue 5, October 2020 – Available at : https://www.ijsrnsc.org/archive_issue.php?pub_id=83 (Peer Reviewed)

14. S.PooranaSenthilKumar and Dr.B.Subramani, " Survey on Vehicular Adhoc Network Existing protocol QoS Performance and Characteristics",International Journal of Scientific research in Computer Applications and Management Studies,Vol.8,Issue.1,January 2019,ISSN:2319-1953. (Indexed in UGC).

15. S. Pooranasenthilkumar, "A REVIEW OF MAC ADDRESS FILTERING AND SPOOFING IN WINDOWS OPERATING SYSTEM",International Education and Research Journal,Vol. 3,Issue. No. 5,pp.705-706,May-2017,E-ISSN : 2454-9916.(Indexed in UGC)

16. S. Pooranasenthilkumar, "ZIGBEE WITH XMPP APPLICATION SERVER INSTANT MESSAGE COMMUNICATIONS TOOLS", International Journal of Trends in Research and Development, Vol.3(6),pp.323-325, Nov-Dec 2016,ISSN No:2394-9364   (Indexed in UGC)

**National**

1. Poorana senthilkumar S,"ISSUES OF VARIOUS ATTACKS IN MOBILE AD-HOC NETWORKS", Recent Trends in Computing Techniques, pp. 127-132,ISBN : 938065730-7.

2. Poorana senthilkumar S, "ENERGY EFFICIENT ROUTING PROTOCOLS IN MOBILE AD HOC NETWORK BASED ON ENHANCED AODV ROUTING PROTOCOL", IJCSMC International Journal, Vol-2, Issues 7,July 2013 ,Online: ISSN2320-088X.

3. Poorana senthilkumar S, "SURVEY OF VARIOUS SECURITY ATTACKS AND IT ISSUES IN MANET", IJETCAS international journal, Special Issue  NCRICA -14-  2014,  ISSN (Online): 2279-0055, ISSN (Print): 2279-0047

**Presentations in Conference**

**International**

1. ADVANCING BRAIN IMAGE SEGMENTATION A COMPREHENSIVE EXPLORATION OF ENHANCED VGG16 ARCHITECTURE FOR PRECISE NEUROANATOMICAL MAPPING Two days 2nd International Conference on Computing and Data Analytics (ICCDA) 2024  College of Computing and Information Science  College of Computing and Information Science University of Technology and Applied Sciences – Shinas, Oman.- 12-13 Nov 2024.

2. EVALUATION OF ROUTING PROTOCOL FOR LOW-POWER AND LOSSY NETWORKS (RPL) IN INTERNET OF THINGS USING OBJECTIVE FUNCTION" Two days International

Conference on Computing and Intelligent System (ICCIS'21), Sri Krishna Adthiya College of Arts and Science, Coimbatore – 25-26 Aug-2021.

3. A SURVEY ON FLYING AD-HOC NETWORK(FANET) COMMUNICATION PROTOCOLS, International Conference on "Research Trends in Computing Technologies ICRTCT – 18", Dr. N.G.P. Arts and Science College, Coimbatore, 9-Sep-18 & 10-Sep-18.

**National**

1. SURVEY ON COMMUNICATION PROTOCOLS IN FLYING AD-HOC NETWORK (FANET), National Conference on Emerging research trends in Computer Science and Technology, SNMV College of arts and science and Institute of Management, Coimbatore, 1-Feb-19

2. MEDIUM ACCESS CONTROL PROTOCOLS FUNCTION IN OPTICAL NETWORK.National Conference on "Emerging Trends in Big -Data Technologies and Research Issues", Dr. N.G.P Arts and Science College, Coimbatore, 24-Feb-17.

3. ISSUES OF VARIOUS ATTACKS IN MOBILE AD HOC NETWORKS, National Conference at Aignar Anna College, Krishnagiri, 07- Feb- 15

4. SECURITY ISSUES AND CHALLENGES IN WIRELESS NETWORKS . National Conference at PSGR Krishnammal College for Women,Coimbatore, 5-Feb-16.

5. A LOW POWER WIRELESS TECHNOLOGY FOR HOME APPLICATIONS USING ZIGBEE. National Conference New Innovations in Computing Technology at Navarasam Arts and Science college for women, Erode 12-Sep- 14

6. A SURVEY OF SECURITY ISSUES IN MANET, National Conference at Sri Ramakrishna Mission vidhyalya college of Arts and Science, Coimbatore , 23-Sep-14

## Participation in Conference

*National***:**

1. Participated and presented a paper on "A Survey on Layered Approach Privacy in IoT" in the Second International conference on Recent Trends in Computer Science and Data Ayalytics-2024 (ICRTCSDA'24). Organized by Department of Computer Science with Data Analytics, KPR College of Arts and Science and Research, Coimbatore, 2nd Feb- 2024.

2. Participated and presented a paper on " Measures of Security Privacy Challenges and Issues in IoT Service" in the National Seminar on IOT Cyber Security: Challenges and Solutions for Social and Real-Life Applications sponsored by ICSSR, New Delhi. Organized by Department of Computer Science with Cognitive Systems, Dr. N.G.P. Arts and Science College, Coimbatore, 5th Jan- 2024.

3. Participated and presented on " Routing Protocol for Low-Power and Lossy Networks (RPL) Objective Function Metrics Using Internet of Things" in National Conference on Sustainable Computing and Development (NCSD-2023) at PSG College of Arts and Science Department of Computer Science, Coimbatore on 2nd Feb - 2023.

4. Participated in and successfully completed - UGC Approved Short Term Professional Development Programme Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Professional Development Programme on "Implementation of NEP2020 for University and College Teachers" held from 07- 15 Oct - 2022.

5. Participated in ICSSR sponsored National level seminar on Industry 4.0: Technologies, outcome & future of manufacturing to celebrate the Azadi ka Amirt Mahotsav Orgainzed by Department of Computer Science, CHRIST (Deemed to be University), Bangalore on 29th Aug- 2022.

6. Participated and presented on "Evaluation of Routing Protocol for Low-Power and Lossy Networks (RPL) in Internet of Things using Objective Function" in Two days International Conference on Computing and Intelligent System (ICCIS'21) Krishna Adthiya College of Arts and Science, Coimbatore – 25.08.2021 – 26.08.2021.

7. Participated and presented on "Survey on Communication Protocols in Flying Ad-Hoc Network (FANET)", National Conference on Emerging Research Trends in Computer Science and Technology, SNMV College of Arts and Science and Institute of Management, Coimbatore, 1st - Feb-19.

8. Participated and presented on "A Survey on Flying Ad-Hoc Network(FANET) Communication Protocols", International Conference on "Research Trends in Computing Technologies ICRTCT – 18", Dr. N.G.P. Arts and Science College, Coimbatore, 9-Sep-18 & 10-Sep-18.

9. Participated on Emerging Education Models for 21st century Learner (NCEEM- 2015), Association of Principals of College Bharathiar University Jointly with UGC HRDC, Bharathiar University, August 2015 at Dr.N.G.P Arts and Science College, Coimbatore. 1- Aug-15.

10. Participated on Research Trends in Computer Technologies, Dr.N.G.P. Arts and Science College, Coimbatore, 30- Jan- 14 to 31-Jan-14.

## Participation in Seminars

1. Industry 4.0 Technologies, Outcomes & Future of Manufacturing, (ICSSR Sponsored), Christ University, Bangalore, 26-Aug-2022

2. Cybersecurity and Its Applications, SRM Institute of Science and Technology Tiruchirappalli ,04- Apr-22

3. BIG DATA STORAGE AND ANALYTICS, Dr.N.G.P Institute of Technology, Coimbatore, 27-Dec-13

4. RECENT TECHNOLOGY IN IT, KG College of Arts and Science ,Coimbatore 9- Feb-13.

5. TEMPORAL PARALLELISM & UNLOCK POTENTIAL, Maharaja CoEducation Arts and Science College, Erode,21-Feb -12.

## Participation in Workshop

1. Nine Days National Level Workshop on DEVOPS held from 16 June 2023 to 24 June 2023 organized by the Faculty of Science and Humanities, Department of Computer Science & Applications (B.Sc CS), SRM Institute of Science and Technology, Ramapuram, Chennai – 600 089.

2. Virtual workshop on" LoRaWAN demonstration and Intellectual Property Rights – patent", Organized by Easwari Engineering College – Chennai 26-Jul-2020.

3. One day National Level workshop on Outcome Based Education by IPSR Solution Limited Kerala, 04-Mar-2023.

4. One day National Level workshop on Advanced Artificial Intelligence (AI) Methods in Breast Cancer Diagnosis and Clinical Research, Dr. N.G.P. Arts and Science College Coimbatore, 26-Nov-2022.

5. NPTEL workshop, PSG College of Arts and College,22-Jan-18

6. MOBILE APPLICATION DEVELOPMENT, Dr. N.G.P. Arts and Science College, Coimbatore 18-Dec-17 to 19- Dec – 17.

7. DATA VIZUALIZATION WITH TABLEAU,Dr. N.G.P. Arts and Science College, Coimbatore 07-Aug-17 to 8-Aug-17.

8. MATLAB FOR SOLVING RESEARCH PROBLEMS, Center for Research, Dr.N.G.P. Arts and Science College, Coimbatore, 31-Jul-17.

9. FINISHING SCHOOL TRAINING PROGRAMME FOR FACULTY MEMBERS-2010, Department of Extension and Career Guidance ,Bharathiar University, Coimbatore .3-Jan-11 to 5-Jan-11.

## Participation in Orientation Programme / Short Term Courses

1. IMPLEMENTATION OF NEP2020 FOR UNIVERSITY AND COLLEGE TEACHERS, UGC – Approved Short term Professional Development INDIRA GANDHI NATIONAL OPEN

UNIVERSITY , Staff Training and Research Institute of Distance Education New Delhi, 07-15 Oct-2022.

2. SHORT TERM COURSE ON TEACHING AND LEARNING TECHNIQUES IN HIGHER EDUCATION, UGC Sponsored – Human Resource Development Centre, Bharathiar University, 29-Aug-16 to 3-Sep-16.

3. INSPIRE INTERNSHIP SCIENCE CAMP, Sponsored by Department of Science & Technology, Govt. of India, Dr. N.G.P. Arts and science College, Coimbatore, 18-Nov-13 to 22-Nov-13.

## Participation in Faculty Development Programme

1. International Level Virtual Faculty Development Programme on "AI for Educators: A Six days Faculty Development Journey " Organized by Department of Software Engineering, Periyar Maniammai Institute of Science and Technology, Valam, Thanjavur, Tamil Nadu, India. from 18.03.2024 to 23.03.2024.

2. International Level Faculty Development Programme on "Modern Research Convergence in Next Generation Computing" organized by the Department of Computer Science & Engineering, Sri Krishna College of Engineering & Technology (Autonomous), Coimbatore, from 18.12.2023 to 22.12.2023

3. 5 Days Faculty Development Programme on Internet of Things for Emerging Technical Applications Organized by Department of Electronics and Communication Engineering, M.P.NACHIMUTHU M.JAGANATHAN ENGINEERING COLLEGE, Erode from 12.08.2024 to 17.08.2024.

4. Five Day Faculty Development Programme on "Data Science Specialization using Python" organized by the department of Computer Science, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore, from 19.06.2023 to 23.06.2023

5. Five day FDP on "IQAC FDP SERIES - KNOWLEDGE TRANSFORMATION PROGRAMME", SANKARA college of science and commerce, 24-Jan-22 to 29-Jan-22.

6. Five day FDP on "BLOCK CHAIN TECHNOLOGY - APPLICATIONS, ISSUES AND CHALLENGES", Sri Venkateswara college of Engineering and Technology, Chittoor, Andhra Pradesh,18-Apr-22 to 22.04.2022.

7. Online FDP on "RESEARCH METHODOLOGY AND PEDAGOGY FOR TERTIARY EDUCATION",Dr.N.G.P. Arts and Science,15-Jun-21 to 21-Jun-21.

8. INTRODUCTION TO R PROGRAMMING, ICT Academy, Dr. N.G.P. Arts and Science College, Coimbatore, 30-Aug-18 to 31-Aug-18.

9. QUALITY MEASURES IN HIGHER EDUCATION, Dr.N.G.PArts  and Science College ,Coimbatore, 3-Dec-18  to 9-Dec-18.

10. STRESS MANAGEMENT ,ICTAcademy, Sri JayendraSaraswathyMahaVidyalaya College of Arts and Science, Coimbatore, 12-Jul-18 & 13-Jul-18.

11. EXPLORING DATA SCIENCE- AN INSIGHT INTO DATA ENGINEERING, Technoturf, Coimbatore, 27-Jan-18 to 28 - Jan- 18.

12. MOBILE APP DEVELOPMENT, ICTACT ,Sengunthar Engineering College, Erode, 15-Dec-15 to 19-Dec-15

13. ENHANCING TEACHING SKILLS MISSION 10X , WIPRO, Dr. N.G.P. Arts and Science college Coimbatore, 6- Aug -13 to 8-Aug- 13.

14. .NET(C#) MICROSOFT CERTIFICATE, ICTACT ,Sengunthar Engineering College, Erode, 29-Aug-12  to  2-Sep- 12.

## Conference / Seminar / Workshop Organized

1. *Coordinator, 5 day Facutly Development Progrmme on "* Microsoft Azure AI Engineer", MEITY, ICT Academy, Dr. N.G.P. Arts and Science College, Coimbatore, 03-Feb-25 to 07-Feb 25.

2. *Coordinator, Power Seminar on "*EMPLOYABILITY SKILLS FOR THE FUTURE*",* ICT Academy, Dr. N.G.P. Arts and Science College, Coimbatore,  *5- Jan-19.*

3. *Coordinator, Faculty Development Programme on* INTRODUCTION TO R PROGRAMMING, ICT Academy, Dr. N.G.P. Arts and Science College, Coimbatore, 30-Aug-18 to 31-Aug-18.

### Membership in Professional Bodies

| Name of the Professional Body | Nature of membership | Duration |
|---|---|---|
| International Association of Engineers (IAENG) | Life-time | - |