Dr. S. Kamalesh, PhD.
Associate Professor, Department of IT
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Education:

- **Ph.D.** in **Information and Communication Engineering** (Jan. 2011 – Sep. 2016)
  Anna University, Chennai.
  Thesis: CERTAIN INVESTIGATIONS ON CLUSTERING, FAULT TOLERANCE, TOPOLOGY AND SECURITY IN WIRELESS SENSOR NETWORKS.

- **M.E., Computer Science Engineering** (June 2005 – May 2007)
  Anna University, Chennai.

- **B.E., Electronics and Communications Engineering** (Aug 1998 – Dec. 2002)
  Bharathiyar University, Coimbatore.

Employment history

- **2020 Apr – Present – Associate Professor, Department of IT, Velammal College of Engineering and Technology, Madurai.**

  - Having been associated with this esteemed instituition for more than ten years, I served at various capacities for the development of our department.
  - In the Academic front , produced centum results many times in Anna University Examinations.
  - Knowledge in implementing the Outcome Based Education, NBA audit process.
  - Received first examination report on my earlier filed patent (**No. 201741041658, dated 21.11.17**) on 26.10.2020.Successfully defended and uploaded the reply to FER by December 2020.Awaiting for the results.
  - Instrumental in signing several MoUs with industries for the benefit of our college.
  - Serving as a Autonomous Coordinator.
  - Subjects Handled: Computational Intelligence, Software Engineering,Advanced Software Engineering , Advanced Databases.

- 2015 Jun. – Mar 2020 – **Assistant Professor – II** in Department of IT**, Velammal College of Engineering and Technology,** Madurai.

  - Subjects handled: Wireless Networks,Database Management Systems,Software Project Management, ,Social Network Analysis,Information Technology Essentials for UG
    Network Management , Wireless Networks,Machine Learning ,Social Network Analysis for M.E, Network Engineering.
  - Have **Patent Journal publication**, S. Kamalesh and P. Ganesh Kumar, "**IOT Based Water Fertigation System and a method thereof**", App. No. **201741041658**, Published on 01/12/2017
  - Served as a Placement Coordinator for our department.
  - Served as a Class Incharge for various years under UG programme
  - Serving as ICTACT coordinator for our Instituition.
  - Serving as AICTE Coordinator for our department.
  - Successfully submitted my thesis on September 2016.

- 2010 Jan - 2015 May. – **Assistant Professor** in Department of IT**, Velammal College of Engineering and Technology,** Madurai.

  - Subjects handled:Database Management Systems,Software Project Management, Social Network Analysis,Operating Systems,Fundamentals of Programming,Object Oriented Programming,Software Enginnering for UG
    Network Management , Wireless Networks,,Social Network Analysis for M.E, Network Engineering.
  - Served as a Placement Coordinator for our department.
  - Served as a Class Incharge for various years under UG programme
  - Served as Incharge for ME- Computer Science and Networking first batch and responsible for setting up of Wireless networks laboratory for that batch.

  - Instrumental in Collaborating with Tamilnadu Agricultural University,Madurai towards implementing "Smart Irrigation using wsn for Precision Agriculture".Recieved an letter of appreciation from the Agronomy department head for proving the efficiency of the system compared with existing irrigation systems.Also it was published as a article in leading tamil daily – Dinamalar.

- 2007 Jun – 2010 Dec – **Software Engineer, Changepond Technologies,Siruseri IT Park,Chennai, India** .

  - Software developer in Siebel CRM implementation project for Changepond Technologies various prestigious clients.
  - Involved in developer role for their prestigious AFC (Asian Football Confederation – Asian wing of FIFA)project .
  - Served in their Independent Testing Group.
  - Served brief period in their Alfreso development group.

- 2007 Jan -2007 **May – Project Trainee,Ramco Systems,Chennai,Tamilnadu.**
  - Involved in development of ERP solution for Madras Cements using their proprietary ERP product Ramco Virtual Works.
  - Analysed and Prepared documents for various ERP modules.
  - Underwent training for implementing various ERP modules.

- Jan 2003 to Jan 2005 **– Lecturer in KLN College of Engineering** ,Pottapalayam,Sivagangai Dt, India.
  - Worked as a lecturer in ECE department at KLN College of Engineering.
  - Handled subjects like Computer Networks,Data Communication and Networks,Communication Systems etc.

Interested Research Areas

- Artficial Intelligence,Machine Learning,Big data analytics,Cloud Computing,Wireless Sensor Networks.

Scholarships and awards

- Guided a 3 member team of B.Tech IT students for the International level buiness event named"Ventura" organised by Management Department of NIT,Trichy.The team eventually bagged third prize with cash award of Rs.32000/-).

- Received cash award from Velammal Management for producing centum results in DBMS (two times).

Funded Research Projects

1 Funding Agency: AICTE

Scheme: MODROB

Title: Modernisation of IoT Lab with Data Science and Cloud Infrastructure

Sanctioned Amount: 6.8L

Period: 2019 – 2021

2 Funding Agency: DST

Scheme: Technology Development Programme (AGRO-36/2019)

Title: Design and Development of Low-cost Nutrient Sensors and Smart Solar Powered Fertigation System

Amount Requested: 19L

Status: Received first part of the grant tuning to Rs.13.5 lakhs and design work started.

Publications

Patent Journal

S Kamalesh and P Ganesh Kumar, "**IOT Based Water Fertigation System and a method thereof**", Application No. **201741041658**, Published on 01/12/2017.

International Conference:

1. S.Kamalesh,P.Ganesh Kumar,Mounica.M," Comparision of Degree based and LEACH Clustering technique in WSN",ICAAET,Syed Ammal college of Engineering,April 2015
2. Aravind Kumar M,S.Kamalesh,P.Ganesh Kumar,Ponmani,Karthick,"Realtime pest control system using video sensor networks",International Conference on Computational Intelligence,Sethu Institute of Technology,April,2015.
3. Wazim.A,S.Kamalesh,P.Ganesh Kumar,"In-network Guaranteed Data Gathering scheme for arbitrary node failures in Wireless Sensor Networks", International Conference on Engineering Trends and Science & Humanities,Imayam College of Engineering,March 2015.
4. M.Usha Rani, S. Kamalesh, S. Preethi, C. K. Charulekhasri, C. Suganya ,"Web Based Service to Monitor Water Flow Level in various Applications using Sensors" 5th International Conference on Computer Science and Information Technology (ICCSIT'2014), Organized by Planetary Scientific Research Centre (PSRC) Conferences 2014, Malaysia

5. M.Usha Rani, C. Suganya, S. Kamalesh, A. Sumitra "An Integration of Wireless sensor Network through Wi-Max for Agriculture Monitoring" International Conference on Computer Communications and Informatics 2014, Sri Sakthi College of Engineering and Technology, Coimbatore (IEEE Madras Section) 978-1-4799-2352-6/14/$31/IEEE).
6. M. Usha Rani, S. Kamalesh "Web based Service to monitor automatic irrigation system for the Agriculture field using Sensors", International Conference on Advances in Electrical Engineering 2014, VIT University, Vellore, India(IEEE Madras Section)
7. M. Usha Rani, S. Kamalesh, " Energy Efficient fault tolerant topology design scheme for Precision Agriculture using WSN" , 2014 IEEE International Conference on Advanced Communication, Control & Computing Technologies(ICACCCT),Syed Ammal Engineering College, Ramanathapuram, Tamilnadu.

International Journal :

8. P. Ganesh Kumar, S. Kamalesh, B. Muthukarthick and D. Prasaath,"Fault Tolerance by Quartile Method with Outlier Detection in Wireless Sensor and Actor Networks",CiiT International Journal of Networking and Communication Engineering,DOI: NCE052012018,May 2012.
9. S. Kamalesh,P. Ganesh Kumar and K. Thiagarajan,"Clustering Technique in WSN – Degree and Weighted Sign Approach", European Journal of Scientific Research,Volume 85 Issue 1,pp 117-122, August, 2012.

10. Mounica.M, S.Kamalesh, P.Ganesh Kumar,"Survey on security in Wireless Sensor Networks",International Journal of Research,Volume 2, Issue 3, March 2015

11. S. Vijayasharmila,P. Ganesh Kumar,S. Kamalesh,"A Survey on Connected Dominating Sets (CDS) Both in the Wireless Sensor Networks and Wireless Ad Hoc Networks",International Journal of Engineering Research & Technology,Vol. 4 - Issue 02 (February - 2015).

12. S. Kamalesh,P. Ganesh Kumar and Mounica.M,"Comparision of degree based and Leach clustering technique in WSN",International Journal of Applied Engineering and Research(accepted).

13. S.Kamalesh and P.Ganesh Kumar 2015 ,"Data aggregation in wireless sensor network using SVM based failure detection and loss recovery", Journal of Experimental & Theoretical Artificial Intelligence, 2015,http://dx.doi.org/10.1080/0952813X.2015.1132262(Annexure 1 Version 2015)

14. S.Kamalesh and P.Ganesh Kumar 2015,"Fault Tolerant Tree Management for Node Failures in Wireless Sensor Network", Research Journal of Applied Sciences, Engineering and Technology 11(4): 440-446, 2015(Annexure 2 Version 2015 - ISSN: 2040-7459; e-ISSN: 2040-7467)

15. S.Kamalesh and P.Ganesh Kumar 2015,"Fuzzy based Secure Intrusion Detection System for Authentication in Wireless Sensor Networks",Journal of Computational and Theoritical nanoscience (Accepted for publication - Listed in Annexure 1 Version 2015)

16. Deepika T R, Keerthana K, Ramya T S, Kamalesh S ,"Pneumonia Detection using Chest X-Ray with Deep Learning", International Research Journal of Engineering and Technology ,Volume 7, Issue 4, April 2020 S.NO: 530.

17. Swetha S, Abarna A, Sornadevi G, Kamalesh S ,"Classification of Retinopathy using Machine Learning", International Research Journal of Engineering and Technology ,Volume 7, Issue 4, April 2020 S.NO: 377