

## PROFILE

**Dr. A.M.KALPANA**

### PERSONAL DETAILS



**Nationality** : Indian.  
**Phone** : 0427-2346102  
**Mobile** : +91-9944826102  
**Fax** : +91-0427-2346458.  
**E-mail** : kalpana.gce@gmail.com  
**Address** : Professor & Head of Department  
Department of Computer Science and Engineering  
Government College of Engineering  
Salem-636 011

### Academic qualifications

#### Academic Background

S.No	Degree	Institution/ University	Year	Subjects	Class and Percentage
1.	Ph.D.	Anna University, Chennai	2013	Information and Communication Engineering	Commended
2.	M.E	Sona College of Technology Anna University, Chennai	2007	Computer Science and Engineering	First class with Distinction, 82%
3.	B.E	Bharathiyar University	1999	Computer Science and Engineering	I Class, 70%

## Academic Experience

- Total Experience: **25 years**

## Responsibilities include

- Head of Department for CSE and additional incharge for ECE branch till 2024 and assisting the Principal in academic and administrative activities.
- Head for Tamilnadu polytechnic admissions software development team for the year 2020-21 & 2021-22.
- TEQIP coordinator for the institution from 2014 onwards (TEQIP-II and TEQIP III).
- Single Point of Contact (SPOC) for Infosys Campus Connect Programme for the students till the year 2013.
- Coordinator for cyber security cell for the institution
- Member of sexual harassment redressal committee ,Anti Raging squad.
- Coordinator for TCS, Campus Commune programme for the students.
- Coordination of department level activities for Research and Development.
- Project coordination, for the B.E CSE students.
- Coordination and Administration of AICTE, Anna University, NBA and UGC related activities.
- Coordinator, TAHDCO – Placement Training for SC/ST students.
- Coordinating with industries like TCS, Infosys, Accenture and IBM.
- Selection committee member for innovative E-Governance software application, Mentor for IBM great mind challenge.
- Expert member for swachhata ranking
- Assisting the Principal in procurement of equipment for the laboratories.
- Chief Faculty Advisor for all the years of Computer Science and Engineering students.
- Coordinating and undertaking research and development activities in Software Engineering research area.
- Coordination and Administration of IEEE and CSI college chapter activities.
- Organizing conferences and Faculty Development Programmes.
- Served as Deputy Warden and Residential tutor for institution Ladies hostel for more than ten years.

## Workshops / conferences / FDPs organized

- National Conferences organized/ conducted : 20
- National level symposium organized/ conducted : 21
- FDPs conducted : 35
- Seminars for students, organized : 40
- Expert Lectures delivered : 25

## Subjects Taught/Teaching

- Software Engineering
- Operating systems
- Mobile Computing
- Data Structures
- Software project management
- Distributed Computing

## Major positions held

- Recognised Supervisor by Anna University for PhD
- Subject expert for Anna University Ph.D. Viva Voce examination under Information and Communication Engineering.
- Chairman, Board of Studies, CSE&IT, GCE, Salem.
- University nominee for Board of Studies, CSE, Sethu Institute of Technology, Virudunagar, Muthayammal Engineering college, Erode Sengunthar College and Mahendra College of Engineering, Tiruchengode.
- Member, Board of Studies, CSE & IT, ACCET, Karaikudi and Pavaai Engineering College, Mahendra Engineering College, Thiagaraja Polytechnic College, Adhiyaman College of Engineering and KSR College of Technology.
- BOG member at Gnanamani College of Technology, Namakkal, Pavai College of Engineering and Technology, Namakkal.
- Member Pre-Evaluation Board, Anna University, Chennai.
- Remote Center Coordinator for IIT, Bombay Eoutreach courses.
- Member in Anna University affiliation and research committee.
- Recognized Academic Counsellor for IGNOU, since 1996 and number of masters dissertations (MCA level) supervised.

## Research Experience

### Research Areas:

### Doctor of Philosophy (Ph.D) in Computer Science and Engineering

Area of Research : Software Engineering, Data Mining, Sensor networks

University : Anna University, Chennai.

### Publications:

**Vidwan Expert ID** : 121248  
**Orcid id** : 0000-0002-0675-6285  
**Scopus id** : 57153137400  
**Researcher id** : AAE-5956-2019  
**Google Scholar Id** : HxPziHQAAAJ

### 1. Refereed Journals

**International Journals** : 50

**National Journals** : 25

**Conferences** : 83

1. [P Nithya, AM Kalpana](#) “Optimal feature selection and classification in crop prediction” ICTACT journal on soft computing, January 2025, volume: 15, issue: 04.
2. [Dhanasekaran Gurusamy, A. M. Kalpana](#) “investigations on cancer categorisation by Using deep learning techniques” Journal of Environmental Protection and Ecology 24, No 6, 2227–2232 (2023)

3. C. Satheesh Pandian, Dr. A. M. Kalpana “HybDeepNet: ECG Signal Based Cardiac Arrhythmia Diagnosis Using a Hybrid Deep Learning Model” Journal of Information Technology and Control Vol 52 issue 2,2023
4. K. Jayanthi, Dr. A. M. Kalpana “Inverted Matchstick Slotted Rectangular Patch (IMSRP) Antenna for Dual-Band (28/38GHZ) 5G - MM Wave Applications” Journal Of Nano- And Electronic Physics vol. 15 No 3, 03022(5pp) (2023)
5. P Nithya, AM Kalpana “Prediction of Suitable Crops Using Stacked Scaling Conjugant Neural Classifier. Intelligent Automation & Soft Computing vol 35 issue 3 ,2023
6. RPS Manikandan, AM Kalpana : Feature selection using fish swarm optimization in big data Cluster Computing, Springer – 2022
7. Manimala.K, Dr.A.M.Kalpana “ Estimation Of State Of Charge And State Of Health Of Batteries Using Hybrid Method And Recurrent Neural Networks” Journal of interdisciplinary cycle research, Vol XIV, issue 2 February 2022
8. R.P.S. Manikandan and Kalpana A M, “Big data feature selection using fish and frog optimization” Computational Intelligence, Wiley publication ,Nov 2021
9. Tharani P, Kalpana A M,” An Enhanced Performance Evaluation Of Workflow Computing And Scheduling Using Hybrid Classification Approach In Cloud Environment” Bulletin of The Polish Academy of Sciences ,2021
10. Nithya P, Kalpana A M,” “ Prediction Of Pesticide Induced Diabetics Using Machine Learning” International Journal Of Multidisciplinary Research In Science ,Engineering And Technology(IJMRSET) vol 4 issue 1,Jan 2021.
11. Nithya P, Kalpana A M,” A Suitable Crop Recommendation using Multiple Kernel Feature Selection Based on Sigmoid Activation in Recurrent Neural Network” Solid State Technology, Volume. 64, issue. 2,2021.
12. S.Ruba and Kalpana A.M” Secure Data Duplication Using Efficient Cryptographic Method” International Journal Of Innovative Research In Science, Engineering And Technology (IJIRSET),vol 10,issue 1,January 2021
13. K. Jayanthi, Dr. A. M. Kalpana “A Compact Circular Shaped Monopole Antenna for UWB Application with WiMAX Band Rejection” Advances in Automation, Signal Processing, Instrumentation, and Control: Select Proceedings of i-CASIC 2020
14. Nithya P, Kalpana A M,” A Hybrid Machine Learning Approach For Identifying The Type Of Fertilizer To Increase The Productivity In Agriculture” ,International Journal Of Innovative Research In Science,Engineering And Technology (IJIRSET) vol 9,issue 12.

15. [S.Ruba and Kalpana A.M](#) “ Machine Learning Techniques Used To Store Efficient Cloud Data Through Chunking And Data Deduplication Process” Proteus journal vol 11,2020
16. [Nithya P, Kalpana A M](#),”Enhanced Machine Learning Approach Used To Analyse Soil Nutrients And Recommending Applicable Fertilizers” International Journal Of Computer Innovative Research In Computer And Communication Engineering (IJIRCCE),” Vol 8 ,issue 9 September 2020.
17. [S.Ruba and Kalpana A.M](#)” Cloud Storage For Secure Data Uploading With Chunk Based Deduplication” International Journal Of Multidisciplinary Research In Science ,Engineering And Technology(IJMRSET) vol 7,issue 5,May 2020.
18. [Nithya P, Kalpana A M](#)” Prediction Of Suitable Crops For Better Production Using Machine Learning” International Journal Of Multidisciplinary Research In Science ,Engineering And Technology & Management (IJMRSETM), vol 6,issue 5 May 2019
19. [S.Ruba and Kalpana A.M](#) “ Deep Learning Distributed A Cloud Storage Systems For Secure Data Uploading With Chunk Based Deduplication” Solid State Technology,vol 63,2020
20. [T.Thenmozhi and Kalpana.A.M](#)” Adaptive motion estimation and sequential outline separation based moving object detection in video surveillance system, Microprocessor and Microsystems, vol 1,2020
21. [S.Ruba and Kalpana A.M](#)” An Efficient Cloud Storage Through Data Deduplication Process Using Machine Learning Techniques” International journal of innovative research in Science, Engineering and Technology (IJRSET), vol 6,issue 10,October 2019.
22. [S.Ruba and Kalpana A.M](#)” [Reduction of data deduplication in cloud storage system using neural network based machine learning method](#)” International journal of Multidisciplinary research in science ,Engineering and Technology(IJMRSET) vol 4 issue 1,Jan 2021.
23. [S.Ananth and Kalpana A.M](#)” A dynamic technique to enhance quality of service in software-defined network-based wireless sensor network (DTEQT) using machine learning” International Journal of Wavelets, Multiresolution and Information Processing” July 2019
24. [Kavitha.M and Kalpana A.M](#) ”Low leakage charge recycling technique For power minimization in cntfet circuits” Acta Polytechnica vol 59, 24–34 Feb 2019
25. [R.P.S. Manikandan and Dr. A.M. Kalpana](#)” Big Data Analytics using HDFS “ International journal of Information and computing systems, Volume 5 Issue :12,Dec 2018.
26. [S.Ruba and Kalpana A.M](#) “ Survey on content based chunking in data deduplication on cloud storage environment” CIIT International Journal of data mining and knowledge engineering,vol 10,No 10,November 2018

27. [S.Ruba and Kalpana A.M](#) “ A study on content based chunking in data deduplication for optimized cloud storage” International journal of innovative research in Science, Engineering and Technology (IJIRSET), vol 7,issue 5,May 2018.
28. [Kalpana.A.M, Rajesh.A,Sasikala.R](#) “A Neural Framework To Discover The Probability For Recommendations Using Association With Clustering Methodology” International Journal of Computer Engineering and Applications, Volume XII, Issue II, Feb. 2018,
29. [R.C.Karpagalakshmi, and Dr.A.M.Kalpana](#) “Study On Effective Traffic Organization With Fuzzy Using Neighbor Junction Points” International Journal of Pure and Applied Mathematics Volume 118 No. 14 pp.149-155, 2018.
30. [Kavitha.M, Kalpana A.M](#) “Carbon Nanotubes: Properties And Applications - A Brief Review “ i-manager’s Journal on Electronics Engineering, Vol. 71 No. 31 March - May 2017
31. [Manikandan R.P.S, Kalpana A.M](#) "Feature Selection Using Fish Swarm Optimization in Big Data” Springer journal, The Journal of Networks, Software Tools and Applications, March 2017,(Annexure-I).
32. [K. Jayanthi, Dr. A. M. Kalpana](#), “Mutual Coupling Reduction Techniques between MIMO Antennas for UWB Applications”, September 17 Volume 5 Issue 9 , International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, PP: 18 – 22
33. [Kalpana A M, Tharani P](#) “An Exploration of Security Issues in Cloud Environment”, June 17 Volume 5 Issue 6 , International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, PP: 236 – 243
34. [Kalpana.A.M, Rajesh.A,Sasikala.R](#), “An optimal retrieval technique in text mining using GSO based prefix span algorithm and improved K-means” Int. J. Business Intelligence and Data Mining, Vol. 11, No. 3, 2016(Annexure-I)
35. [Nithya P, Kalpana A M](#), “Big Data Clustering Algorithm and Strategies”, June 17 Volume 5 Issue 6, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, PP: 1387 – 1391.
36. [Kalpana .A.M,Karpagalakshmi.R.C,Tensing.D,2017](#)” implementation of RTT-GM for Vehicular recognition and Localization “Asian Journal of Research in Social Sciences and Humanities Vol. 7, No. 1, January2017, pp. 941-949
37. [R.P.S. Manikandan and Dr. A.M. Kalpana](#), 2016. “Design of transactional prediction using plan mine and genetic algorithms” International journal of computer engineering & technology (IJCET).volume:7, issue:6,pages:50-54.
38. [R.C.Karpagalakshmi, and Dr.A.M.Kalpana](#) “Multi-point co-ordination scheme for traffic control systems” Asian Journal Of Research In Social Sciences And Humanities, vol 6,no.10,October 2016,pp.911-919(Annexure-I) .

39. [R.C.Karpagalakshmi, D. Tensing and Dr.A.M.Kalpana](#)” A Robust Vantage Point based Event Detection Architecture for Efficient Object Detection and Localization” Asian Journal of Information technology, April 2016 (Annexure-I)
40. [Karpagalakshmi, RC, Tensing, D &Kalpana, AM](#) ‘Image Localization using Deformable Model and its Application in Health Informatics”, Journal of Medical Imaging and Health Informatics, ISSN : 2156-7018(Print), ISSN : 2156-7026 (Online) Volume 6, Number 8, December 2016, pp. 1972-1976(5)
41. [R.P.S.Manikandan and Dr.A.M.Kalpana,](#)” Tracking and Analyzing the Public Opinions by Interpretation Techniques” IJIRT , April 2016 , Volume 2 Issue 11.
42. [Kalpana A.M.,Tamizarasu.K, Ebenezer Jeyakumar.A,](#)”A Fuzzy logic based framework for assessing the maturity level of Indian small scale software organizations” , computer system science and engineering, March 2014, vol 29 issue 1,page no: 91-105.(Annexure-I)
43. [Kalpana A.M.,Tamizarasu.K, Dr.Rajaram.M,](#)”Maliciousness in mobile Adhoc networks:A performance evaluation”, journal of Theoretical and Applied Information Technology, July 2014 vol 65,issue 3,page no:715-722
44. [Kalpana A.M., M.Sivasankar](#) “Requirement Management for Agile Software Development “International Journal of Systems, Algorithms and Applications, December, 2012, vol 2, issue 12.
45. [Kalpana A.M., Ebenezer Jeyakumar,](#)” An Questionnaire based assessment method for process improvement in Indian small scale software organizations.” European Journal of Scientific Research, September 2011, vol60 issue-3.
46. [Kalpana A.M., Ebenezer Jeyakumar ,](#)” Software process improvisation framework based on fuzzy logic approach for optimizing Indian small scale software organizations “ International Journal of Multimedia and Ubiquitous Engineering Vol. 6, No. 1, January, 2011 .
47. [Kalpana A.M., Ebenezer Jeyakumar.](#) (March 2010), “Fuzzy logic based software process improvisation framework for Indian small scale software organization” International Journal of Computer Science and Engineering, Vol. 2 issue 3 .pp 852-859.
48. [Kalpana A.M., Ebenezer Jeyakumar](#) (March 2010), “Software Process Improvisation Framework using Fuzzy Logic based approach for Indian Small Scale Software Organization”, International Journal of Computer Science and Network Security, Vol. 10, pp. 111-118.
49. [Kalpana,A.M.,Ebenezer Jeyakumar.](#) (April 2010), “Software process improvisation framework for indian small scale software organizations using fuzzy logic”, International Journal of Computer Science and Information Security, Vol. 8, pp. 156-162.

## International Conferences

A survey on wireless sensor networks and its routing protocol	Proceedings of International Conference on advances in Robotics, Energy and Network systems” March 2017
Moving object detection and tracking based on background subtraction	Proceedings of International Conference on advances in Robotics, Energy and Network systems” March 2017
Streaming data analysis in big data	Proceedings of International Conference on advances in Robotics, Energy and Network systems” March 2017
Design and performance issues of MIMO antennas for UWB applications	Proceedings of International Conference on advances in Robotics, Energy and Network systems” March 2017
‘Design and Analysis of a robust Ray Traced Template and improvised Gradient Model for Vehicular Recognition and Localization’.	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016)
Detection and Tracking of Moving Object Based on Background Subtraction	International Conference on "Recent Innovation in Science, Technology and Management" (ICRISTM-16) at Indian Federation of United Nations Associations (IFUNA) , New Delhi, India on 12 <sup>th</sup> June 2016
Design and performance of MIMO antennas	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016) 18.3.16
Implementation of Inventory Control System by Genetic Algorithm	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016) 18.316
A CPW fed micro strip antenna for ultra wide band applications	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016) 18.316
Detection and tracking of moving object based on background subtraction	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016) 18.316
Reliability Enhancement for cloud services-A survey	On Advancements In Power Electronics and Industrial Drives (NCAPEID 2016) 18.316
Improvisation of software quality using Software Defect Prediction Technique	National Conference on Advancement in Power Electronics and Industrial drives
Outlier analysis and detection using k-medoids with Support Vector Machine	International Conference on computer communications and informatics
A study on feature selection in big data	International Conference on computer

	communications and informatics
A survey on wireless sensor network and its routing protocol	International conference on advances in Robotics, Energy and Network systems” March 2017
Self assessment tool for small manufacturing enterprise (SME)	Proceedings of International Conference on Computing Communication and networks “ICCCN 2008”
Long-Term Cross-Session Relevance Feedback Using Virtual Features	Proceedings of International Conference on “ICOREM” May 27- Anna University, Tiruchirappalli.
A framework approach using CMMI for SPI to Indian SME’s	Proceedings of International Conference on “ICICT 2010” M.Kumarasamy College Engineering, Karur.
An Optimized Software Improvisation Framework using Fuzzy Logic Based Approach for Indian Small Scale Software Organization.	Advances in Information Sciences and Service Sciences –AISS
Software Process Improvisation in Small Scale Software Organizations (SSSO)	Medwell Online Journal

- Qualified Research Supervisor for M.S by Research and Ph.D Programmes at Anna University, Chennai.

**Scholars currently undergoing research: 09 Nos**

**Number of scholars completed research: 10 Nos.**

#### **Reviewer and Editorial Member**

- Reviewer for Inderscience ,Taylor and Francis, Springer journals.
- Reviewer for Journal of Excellence in Computer Science and Engineering.
- Reviewer for Greener journals
- Editorial member for Asian Journal of Applied Science and Technology (AJAST), Indian Journal of Computing and Software testing.
- Member of Advisory committee First International Conference on Advanced Computing and Big Data Analytics - ICACB'18.
- Member of Technical committee, Third IEEE conference on Emerging Devices and Smart Systems, (ICEDSS2018).
- Member of Technical committee Fifth National Conference on Futuristic Trends in Computing and Information Technology (FTCIT 2016).
- Member of Technical committee International Conference on Advances in Robotics, Energy and Network Systems, ICARENS, 2017.
- Member of Technical committee of National Conference on Computing & Security Technologies NCCST 15.

#### **Professional Affiliations**

- Life Member, ISTE India, 2002 onwards
- Member, IEEE, 2002 onwards
- Life Member, CSI (India), 2007 onwards

- Member, IE from 2012 onwards