Faculty Name: Dr. A. Balamurugan

<u>Educational Qualification</u>

Degree	Branch	Institution	Year
B.E.,	**B.E (ECE)**	IRTT Erode / Bharathiar University	1987 -1991
M.E.,	**M.E(CSE)**	GCT, Coimbatore / Bharathiar University	1999 - 2001
PhD	**Ph.D.,**	Anna University, Chennai.	2007-2012

Experience:

Period	No. of. Years	Designation/Nature of job	Institution/Organization
1992-2005	**13**	**Assistant Professor**	**Sri Krishna college of Technology**
2005-2016	**11**	**Professor and Head**	**Sri Krishna College of Technology**

<u>PUBLICATIONS</u>

JOURNALS:

1. Published a paper Titled "Minimum Power Configuration (MPC) approach for optimizing power consumption in Wireless Sensor Networks," in **Ubiquitous Computing and Communication Journal (UBICC Journal),** Volume 5, Special Issue – CCITA 2010, ISSN 1994-4608.

2. Published a paper Titled "Efficient Coverage and Connectivity with Minimized Power Consumption in Wireless Sensor Networks" in **International Journal of Computer and Network Security (IJCNS),** Volume 2, No.10 2010.

3. Published a paper Titled "Coverage eligibility rule based coverage maintenance protocol for energy conservation in Wireless Sensor Networks" in **Journal of Computer Science(JCS),** JCS 7(10) : 1545-1553,2011, ISSN 1549-3636.

4. Published a paper Titled "IPSD: New Coverage Preserving and Connectivity Maintenance Scheme for Improving Lifetime of Wireless Sensor Networks" in WSEAS Transactions on Communications, Issue 1, Volume 11, January 2012, E-ISSN: 2224-2864.

5. Published a paper Titled "Intelligent Security System with Wireless Sensors" in International Journal of Computer Applications, Volume 60-No.15, December 2012(0975-8887).

6. Published a paper titled "An Improved method for Multiple Target Tracking in WSN" in International Journal of Research in Computer Applications and Information Technology, Volume 2, Issue 1, March 2014, pp09-16.

7. Published a paper titled "An Energy Efficient Fitness based Routing Protocol in Wireless Sensor Networks" in ICTACT Journal on Communication Technology, March 2014, Volume 5, Issue 1, pp 894-899.

8. Published a paper titled "An Improved Energy Efficient Multipath Routing in WSN" in International Journal of Computer Science and Mobile Computing, Volume 3, Issue 5, May 2014, pp 201-209. ISSN 2320 – 088X.

9. Published a paper titled "A Survey on Enhanced Energy Efficient Data Gathering Scheme in Wireless Sensor Networks" in International Journal of Science and Research, Volume 3, Issue 11, Nov 2014, pp 1686-1689. ISSN 2319 – 7064.

10. Published a paper titled "An Efficient Data Aggregation Scheme and Cluster Optimization in Wireless Sensor Networks", in International journal of Innovative Research in Computer and Communication Engineering.

11. Published a paper titled " An Enhanced Energy Efficient Routing Scheme in Wireless Sensor Networks" , in international journal of Advanced Research in Computer Science, Volume 6, Issue 2, April 2015.

12. Published a paper titled "Automated Emergency System in Ambulance to Control Traffic Signals using IoT " in international journal of Engineering And Computer Science, ISSN:2319-7242,Volume 4, Issue 4 ,April 2015.

13. Published a Paper titled "Intelligent E-Health Gateway Based Ubiquitous Healthcare Systems in Internet of Things" in International Journal of Scientific Engineering and Applied Science,ISSN 2395-3470,Volume 1,Issue 9,pp 284-290,December 2015.

14. Published a Paper titled "Automation Testing using coded UI Test" in International Journal of Scientific Engineering and Applied Science, ISSN 2395-3470,Volume 1,Issue 9,pp 284-290,April 2016.

CONFERENCES

➢ **Title:** Physiological communication via eye blinks-A new approach in the detection and duration analysis.

Conference: National Conference on image processing and networking, National Engineering College Kovilpatti, Tamilnadu

Period: 13th &14th February 2004.

➢ **Title:** Addressing routing issues in MobileIP : A SIP Based Approach

Conference: International Conference on computers, controls and communication (INCON-CCC2004), Sri Sai Ram Engineering College, Chennai.

Period: 20th to 22nd August, 2004.

➢ **Title:** An effective terminate Routing technique for Mobile Adhoc Networks.

Conference: International Conference on Digital Communication and computer Applications DCCA 2007 organized by Faculty of computer & Information technology, Jordan University of Science and technology, Jordan.

Period: 19th to 22nd March, 2007.

➢ **Title:** A New Framework for Content based Image Retrieval using Indexed vectors of Texture Feature

Conference: Third National Conference on Innovations in Information & Communication Technology NCIICT 2007, PSG college of Technology, Coimbatore.

Period: 21st & 22nd September, 2007.

➢ **Title:** Intellectual Scrutinizer for compute, storage, Network and System Characteristics of Linux system software service.

Conference: International Conference on Information Society. (I-Society 2007), Merrillville, Indiana, USA.

Period: 7th to 11th October , 2007.

➢ **Title:** Security in Mobile Adhoc Networks

Conference: Second International Conference on Advanced computing & Communication Technologies, organized by ASIA PACIFIC INSTITUTE OF INFORMATION TECHNOLOGY Panipat (Hariyana), India.

Period: 3rd & 4th November, 2007.

➢**Title:** Performance evaluation of proactive and reactive routing protocol in Adhoc Networks.

Conference: 2nd International Conference on Advanced computing & Communication Technologies, organized by ASIA PACIFIC INSTITUTE OF INFORMATION TECHNOLOGY Panipat (Hariyana), India.

Period: 3rd & 4th November, 2007

➢**Title:** Self Organizing Mobile Sensor Network: A distributed solution to coverage problem.

Conference: 7th national Conference on advanced Computing & Applications (NCACA-2008), organized by Department of CSE, PSG College of Technology, Coimbatore.

Period: 4th & 5th January 2008.

➢**Title:** Improving Energy Consumption of Mobile Elements with Dynamic Deadlines and Waiting States.

Conference: National Conference on Recent Trends in Information and Communication Technology, BannariAmman Institute of Technology, Sathyamangalam.

Period: 17th & 18th March 2008.

➢**Title:** A New Enerrgy Efficient Scheduling for Mobile Elements in Wireless Sensor Networks.

Conference: National Conference on Recent Advances in Computer Technologies at Karunya University, Coimbatore.

Period: 28th March 2008.

➢**Title:** A New Multisource Reliable Broadcasting in Mobile Adhoc Network

Conference: National Conference on Recent Trends in Information & Communication Technology at Bannari Amman Institute of Technology, Sathyamangalam.

Period: 17th & 18th March 2008

➢**Title:** Scheduling of Broadcasts in Mobile Adhoc Networks.

Conference: Second National Conference on Computing & Communication (NCCC'08) at Dr.Mahalingam College of Engg & Tech, Pollachi.

Period: 8th & 9th April 2008.

> **Title:** Video Performance Evaluation of AODV and MAODV routing protocols in Adhoc Networks.

Conference: Second National Conference on Computing & Communication (NCCC'08) at Dr.Mahalingam College of Engg & Tech, Pollachi.   **Period:** 8th & 9th April 2008.

➢ **Title:** SAAL: Security at all levels in a wireless sensor Network

Conference: International Conference on Communication, Convergence and Broadband Networking (ICCBN-2008) at IISC Bangalore

Period: 17th to 20th July 2008.

➢ **Title:** Minimum Power Consumption with Efficient Coverage & Connectivity in Wireless Sensor Networks

Conference: Trends in Industrial Measurements and Automation (TIMA – 2009) at MIT Campus, Chennai.   **Period:** 5th & 6th Jan 2009.

➢ **Title:** Minimum Power Configuration (MPC) Approach for Optimizing Power Consumption in Wireless Sensor Networks.

Conference: International Conference on Computing, Communication and Information Technology Applications, ISBN 978-81-909789-0-3.

Period: 21-23 Jan 2009.

➢ **Title:** Enhancing QoS in Routing for Wireless Sensor Networks using Medial Axis Protocol

Conference: National Conference on Computing , Communication and

Information Systems (NCCCIS 2009) at Sri Krishna College of

Engineering   & Technology , Coimbatore -08.

Period: 13th & 14th Feb 2009.

➢ **Title:** Minimum Power Configuration (MPC) Approach for Optimizing Power Consumption in Wireless Sensor

Conference: International Conference on Computing, Communication & Information Technology Applications held   at V.L.B.Janakiammal College of Engineering and Technology , Coimbatore -42.

Period: 21st - 23rd Jan 2010.

➤ **Title:** Estimating the Bandwidth for IEEE 802.11 based Wireless Ad-Hoc Networks

Conference: First International Conference on Intelligent Design and Analysis of Engineering Products, Systems and Computation held at Sri Krishna College of Engineering & Technology , Coimbatore.

Period: July 9& 10, 2010.

➤ **Title:** Energy Efficient Data Mule scheduling in wireless sensor networks

Conference: First International conference on innovations in

computers,Information and communications held at PSG college of

Technology, Coimbatore.

Period: January 6th & 7th 2012.

➤ **Title:** Intellectual Protection With Wireless Sensors

Conference: Sixth National conference on Electrical and Instrumentations Systems held at Government College of Technology, Coimbatore.

Period: April 13th 2013.

➤ **Title:** Highly secured sharing of PHP in Cloud

Conference: National Conference on Recent Trends in Information and Communication Technology at Bannari Amman Institute of Technology.

Period: March 21st 2014.

Details of Winter/Summer schools attended:

1. Two week AICTE/ISTE short term training program on "Genetic Algorithms for Network traffic Scheduling" held at Govt. College of Technology, Coimbatore on 17th to 30th Nov 2003.

2. Two week AICTE/ISTE short term training program on "Parallel Algorithms and Architecture for High Performance Computers" held at Govt. College of Technology, Coimbatore on 5th May 2004 to 06th June 2004.

Details of Guest Lectures delivered:

1. Delivered hands on session on Network Simulator – NS2 at DRDO Sponsored Two days Workshop on ADVANCES IN MOBILE AND WIRELESS NETWORK TECHNOLOGIES, VLB Janakiammal College of Technology, Coimbatore on 25th & 26th March 2009.
2. Delivered a seminar on "Coverage Strategies for Wireless Sensor Networks" on 3.08.2011 at GCT, Coimbatore.
3. Delivered a special seminar on "Energy Conservation schemes for improving Lifetime in WSN" on 15.02.2011" at GCT, Coimbatore.
4. Chaired a session titled "Mobile Networks" in the International Conference on Advanced Communications system ICACS 2007 organized by Government College of Technology, Coimbatore held during the period from 10th to 12th January 2007.
5. Chaired a session titled "Data Communications and Networking" in the International Conference on Digital Communications and Computer Applications DCCA 2007 organized by **Jordan University of Science and Technology, Jordan** held during the period from 19th to 22nd March 2007.
6. Chaired a Technical session in the National Conference on "Frontiers of Computer Science and Computation Technologies NCFCSCT 2013" organized by Sri Ramakrishna Engineering College, Coimbatore held during the period from 12th to 13th April 2013.
7. Delivered a keynote address in the International Conference on "Adaptive Technologies for Sustainable Growth ICATS 2014", Organized by Paavai Engineering College, Namakkal, on 09-05-2014.

Conference/seminars attended

1. Attended a Short-term course on induction training for teachers at GCE, Salem held during the period 18th to 20th December , 1992.
2. Attended a National Seminar on small Hydro Power project at C.I.T., Coimbatore held during the period 03rd & 04th December, 1993.
3. Attended a Workshop on exam reforms conducted by Bharathiar University at Kongu Engg. College, Perundurai.

4. Attended a National Conference on "Advanced Computing" conducted by P.S.G. College of Technology, Coimbatore held during the period
   a. 2nd & 3rd February , 2001.
5. Techno Vision 2003, Technical seminar cum Exhibition organized by Computer India, Coimbatore on 11th & 12th July 2003 at Coimbatore.
6. Attended a seminar on "Software Architecture" at Coimbatore Institute of Technology, Coimbatore on 28th September 2003.
7. Attended a one day Seminar on LINUX organized by Computer Society of India at Andra Hall, Coimbatore on 24th April 2004.
8. Attended a workshop on "Unit Testing Concepts & Automation in Software Development" held at VLBJCET, Coimbatore, on 1st October 2005.
9. Attended a one day seminar on "Information Security Management Systems through BS 7799 / ISO 270001" organized by Computer Society of India at Andra Hall, Coimbatore on 21st December 2005.
10. Attended INAE workshop on "Image and Speech Processing" organized by Indian Institute of Madras, Chennai held during the period 26th to 28th February 2006.
11. Attended a Faculty Development Programme on "Computer Organization and Architecture" organized by IEEE Madras Section at Indian Institute of Technology Madras, Chennai held during the period 14th to 15th October 2006.
12. Attended a one day workshop on "Multimedia and Digital Content Management" at VLBJCET on 7th August 2006.
13. Attended a workshop on "Opportunities of Government Funded R & D Project for Engineering Education Institutions" held at Indian Institute of science, Bangalore on 4th & 5th of Oct 2007.
14. Attended a National Workshop on Intellectual Property Rights – An Indian Perspective Sponsored by Patent office, Chennai & National Institute for Intellectual Property Management (NIIPM), held at GCT Campus, Anna University- Coimbatore, and Coimbatore on 1st & 2nd of Feb 2008.
15. Attended a seminar on "Course Redesign through Blended Learning" held at Dr.Mahalingam College of Engineering & Technology, Pollachi on 20th Feb 2008.
16. Attended a Two day seminar on "e-Learning" organized by Multimedia Lab held at PSG College of Technology, Coimbatore during 27th & 28th March, 2008.
17. Attended a Workshop on "Wireless Communication" as part of 2008 Indo- US Engineering Faculty Leadership Institute at Global Education Center, Infosys Technologies Ltd, Mysore from 9th to 13th June 2008.

18. Attended a 43rd Annual Convention of CSI 2008 & 25th South East Asia Regional Computer Confederation (SEARCC 2008) Conference on Connected Society at Chennai Trade Center, Chennai on 10th to 12th September 2008.
19. Attended a FDP on Network Security sponsored by TEQIP held at
    a. GCT, Coimbatore on 29th & 30th March 2009.
20. Attended a one day seminar on "E-Learning Techniques and Issues "at SKCET on 4th April 2009.
21. Attended a ACM India Annual Conference on "Advancing Computing as a Science and Profession" at Indian School of Business, Hyderabad on 28th and 29th January 2011.
22. Attended a Seminar on "Research Directives" at Sri Krishna College of Engineering and Technology on 5th December 2011.
23. Chaired a Technical Session in Second National Conference on "Frontiers of computer Science and Computational Technology" at Sri Ramakrishna Engineering College on 12th & 13th April 2013.
24. Attended a Workshop on "NPTEL Online Certification Courses" conducted at IIT Madras on 25th February 2014.
25. Attended a Seminar on "Bloom's Taxonomy" at Sri Krishna College of Engineering and Technology on 12th Feb 2015.
26. Attended a Workshop on "Software Testing of Embedded Systems" at Taj Vivanta on 4th September 2015.
27. Attended a Seminar on "Leadership Programme" at Pollachi on 11.12.15&12.12.15

Conference/Seminars organized

1. Co-ordinator for the One day seminar on "Mobile Computing and Parallel Algorithms" organized for the CSE and IT departments, 14th Feb 2004.
2. Co-ordinator for the One day seminar on "Software Testing" organized for the CSE and IT department, December 2004.
3. Organized a short term course on "IT Training Program for Police Personnel", August to September 2002.
4. Co-ordinator for the One day seminar on "Image Processing and its Applications" organized for the CSE and IT Departments on 8th August 2006.
5. Co-ordinator for the One day seminar on "New Perspectives in Research Techniques" on 18th November 2006.
6. Organized a Two days workshop on "Recent Trends in Wireless Computing and Research" during the period from December 9th to 10th 2006.
7. Organized a One Day Workshop on "Multimedia & its Application" on 16th February 2009.

8. Organized a One day Seminar on "Computational Intelligence & Image Processing" on 20th February 2009.

9. Organized a One day Seminar on "Routing Issues in Wired & Wireless Networks" on 5th March 2009.

10. Organized a One day Seminar on ".NET and SDLC Protocols" on 12th March 2009.

11. Organized a Two day workshop on "Advances in Mobile & Wireless Network Technologies "sponsored by DRDO on 25th & 26th March, 2009.

12. Organized Two day Workshop on "Software Requirements Engineering" Sponsored by AICTE,New Delhi on 10th & 11th July, 2009.

13. Organized One day Seminar on "Cloud Computing" on 24th July, 2009.

14. Organized Two day workshop on "Data mining and its applications in healthcare prediction systems" sponsored by DST on 24th & 25th September 2009.

15. Organized Two day Workshop on " Research Directions in Virtualization" Sponsored by CSIR held at V.L.B. Janakiammal College of Engineering and Technology, Coimbatore on 20th & 21st November 2009

16. Organized an International Conference on Computing, Communication and Information Technology Applications during Jan 21-23, 2010 Sponsored by DST, DRDO, ISRO, ICSSR and CSI.

17. Organized a Two day Workshop on "Web 2.0 Tools and RIA(Rich Internet Applications" during 27th and 28th August 2010.

18. Organized a Two day Seminar on "Global Trends and Benchmarks in Green IT" Sponsored by CSIR held at V.L.B. Janakiammal College of Engineering and Technology, Coimbatore on 19th & 20th November 2010.

19. Organized a One day Workshop on "Optimization of Online Query Processing in Database Systems" Sponsored by DRDO held at V.L.B. Janakiammal College of Engineering and Technology, Coimbatore on 11th March 2011.

20. Organized a Two day Workshop on "Cloud Computing in Educational Institutions" Sponsored by DRDO held at V.L.B. Janakiammal College of Engineering and Technology, Coimbatore on 23rd and 24th September 2011.

21. Organized a Two day Seminar on "Emerging Issues and Challenges in Cyber Security" Sponsored by CSIR held at V.L.B. Janakiammal College of Engineering and Technology, Coimbatore on 29th and 30th September 2011.

22. Organized a One day Seminar on "Earth Observing System for Global Sustainability" Sponsored by MOES held at Sri Krishna College of Technology, Coimbatore on 12th July 2012.

23. Organized a One day Workshop on "Green Computing inCloud" Sponsored by TNSCST held at Sri Krishna College of Technology, Coimbatore on 28th September 2012.

24. Coordinator for establishing Wireless Communication Laboratory under MODROB Scheme Sponsored by AICTE, New Delhi.

Other Relevant details:

- Member of the Staff selection Committee in the college for the past 2 years.
- Invited as subject expert for the staff selection committee at VLB Janakiammal Polytechnic College, Coimbatore.
- Resource person for the faculty development program on "Compiler Design" at Sri Ramakrishna Engg. College, Coimbatore.
- Contribution towards preparation of ACCREDITATION PROFORMA for submission to NBA.
- Headed the Committee in preparing the AICTE and ANNA UNIVERSITY yearly reports and New Course Application Proformas.
- Member of Programme Committee of the first International Conference on Digital Communications and Computer Applications.
- Member of Web Designing Contest conducted on 24th September 2008.
- Programme Committee Member of the International Conference on Information & Communication Systems (ICICS – 09) to be held at Amman Jordan during 20th to 22nd December, 2009.
- Member of Editorial Board in the International Journal of Web applications.