## Dr. B. Paramasivan
Professor,
Department of Information Technology.

### Office Address
National Engineering College
K.R.Nagar, Kovilpatti – 628503
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### Residential Address
6A/7 Vasantha Vihar
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Tenkasi, Tamil Nadu

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bparamasivan@yahoo.co.in

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### Education
| | |
|---|---|
| 2009 | **Doctor of Philosophy** |
| | *Information and Communication Engineering,* |
| | ***Anna University Chennai, Chennai.*** |
| 1994 | **Master of Engineering** |
| | *Computer Science and Engineering* |
| | ***Jadavpur university, Calcutta*** |
| 1988 | **Bachelor of Engineering** |
| | *Computer Science and Engineering* |
| | ***Madurai Kamaraj University, Madurai*** |

### Experience
National Engineering College, Kovilpatti, Tamilnadu

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|---|---|
| 2018- Now | *Professor* |
| 2010 - 2018 | *Professor and Head* |
| 2009 - 2010 | *Professor* |
| 2008 - 2009 | *Associate Professor* |
| 2004 - 2008 | *Assistant Professor* |
| 2000 - 2004 | *Senior Lecturer* |
| 1989 - 2000 | *Lecturer* |

### Funded Projects - Principal Investigator
### Completed

- DRDO, New Delhi sponsored funded project on "Studies in Cellular Automata with its Applications on Cryptography" worth Rs.12,19,500 – Duration: 20.09.2016 – 20.08.2018.
- NewGenIEDC, New Delhi sponsored funded project "Design of Braille Print Studio for Visually Impaired People" worth Rs.2,50,000 – Duration: 1 Year.
- AICTE-RPS, New Delhi sponsored funded project "Development of Intelligent Pest and Disease Prediction and Forewarning System for Sustainable Cotton Production" Duration: 3 Years-Recommended
- DRDO, New Delhi sponsored funded project on "Development of an Intrusion Detection System for Mobile Ad-hoc Networks using Game Theoretical Models" worth Rs. 27,19,000 – Duration:21.06.2011 – 20.06.2013.
- AICTE, New Delhi sponsored funded project on "Intrusion Prevention System Development for Ad hoc Network Security" worth Rs. 9,07,000 – Duration: 18.01.2012 – 17.01.2014.
- CSI, Chennai sponsored funded project on "Development of an Intelligent Irrigation System using Wireless Sensor Networks" worth Rs.50,000. – Duration: 01.06.2012 – 31.03.2013.
- Institution of Engineers (IE), Kolkata sponsored funded project on "Design and Development of an Intelligent Structural Health Monitoring System for a Simply Supported Bridge using Wireless Sensor Network" worth Rs.1,50,000. – Duration: 17.10.2012 – 16.10.2014.
- AICTE, New Delhi sponsored funded project under MODROBS Scheme for "Modernization of Common Computing Facility Lab and Establishment of Advanced Computing Environment" worth Rs.6,08,000.- Duration Date: 02.03.2013 – 02.03.2014.

### Publications Details
*Paper Published in International/National Journals: 28*
Articles in Peer-Reviewed Journals (last 6 years)

1. Wireless Body Area Networks: Survey of Recent Research Trends on Energy Efficient Routing Protocols and Guidelines. ***Journal: Wireless Personal Communications.*** doi: https://doi.org/10.1007/s11277-021-09250-0, 2021.
2. Energy Efficient Enhanced OLSR Routing Protocol Using Particle Swarm Optimization with Certificate Revocation Scheme for VANET. ***Journal: Wireless Personal Communications.*** doi: https://doi.org/10.1007/s11277-021-08838-w, 2021.
3. Fuzzy Based Relay Node Selection for Achieving Efficient Energy and Reliability in Wireless Body Area Network. ***Journal: Wireless Personal Communications.*** doi: https://doi.org/10.1007/s11277-021-09027-5, 2021.
4. Distributed Healthcare Framework Using MMSM-SVM and P-SVM Classification. ***Journal: Computers, Materials & Continua*** doi: https://doi.org/10.32604/cmc.2022.019323, 2021.
5. Connectivity analysis of V2V communication with discretionary lane changing approach. ***Journal: The Journal of Supercomputing*** doi: https://doi.org/10.1007/s11227-021-04086-8, 2021.
6. A study on modeling vehicles mobility with MLC for enhancing vehicle-to-vehicle connectivity in VANET.

*Journal:* **Ambient Intelligence and Humanized Computing** Volume: 12. No.8 Pp:8255-8264, 2021.

7. An integrated FIR adaptive filter design by hybridizing canonical signed digit (CSD) and approximate booth recode (ABR) algorithm in DA architecture for the reduction of noise in the sensor nodes. **Journal: Multidimensional Systems and Signal Processing** Doi: https://doi.org/10.1007/s11045-021-00783-y, 2020

8. An improved range based localization using Whale Optimization Algorithm in underwater wireless sensor network. **Journal: Ambient Intelligence and Humanized Computing** Volume:12, No:6 PP:6479-6489, 2020

9. Performance Analysis of Submarine Detection in Underwater Wireless Sensor Networks for Naval Application. ***Journal: Microprocessors and Microsystems*** Doi: 10.1016/j.micpro.2020.103293, 2020.

10. Cellular Automata-Based Anomaly Node Detection in Wireless Sensor Network. ***Journal: Critical Reviews*** Volume:7,No:14 PP-1899-1910, 2020

11. Protection Against SQL Injection Attack in Cloud Computing. ***International Journal of Engineering Research and Technology***. Volume:9,No:2 PP-502-510, 2020.

12. Anomaly detection in wireless sensor network using machine learning algorithm. ***Journal: Computer Communications*** Volume:151, PP:331-337, 2020.

13. A Novel Microprogrammed Reconfigurable Parallel VHBCSE Based FIR Filter for Wireless Sensor Nodes. **Journal: Wireless Personal Communications** Volume:115, No:3, PP:2197-2210, 2020.

14. A comprehensive approach to avoid node selfishness and data redundancy. **Journal:** Journal of Intelligent & Fuzzy Systems Volume:39, No:1, PP:407-419, 2020.

15. **Design and Development of a Novel Localization Scheme for Underwater Wireless Sensor Networks.** **Journal:** Business Data Communications and Networking Volume:16, No:1, PP:1-18, 2020.

16. Cluster-based secure communication and certificate revocation scheme for VANET. **Journal:** The Computer Journal Volume:62, No:2 PP:263-275,2019.

17. Design and implementation of an efficient attack resilient computation algorithm in WSN nodes. **Journal: Cluster Computing** Volume:22, No:2 PP:3301-3311, 2019.

18. Membrane computing inspired protocol to enhance security in cloud network,
***The Journal of Supercomputing Vol:75 No:4 pp.2181-2192, 2019***

19. Anomaly based Web intrusion detection in Wireless Sensor Network using interdependent security game model.
***Journal: Journal of Web Engineering*** Volume: 17. No 6, pp 2053-2069

20. Cluster-Based Secure Communication and Certificate Revocation Scheme for VANET
***Journal: The British Computer Society*** doi:10.1093/comjnl/bxy035

21. Location optimization for RSU deployment and maximizing communication probability in multilane Highway
***Inderscience Journal :***Vol: 25 No:3/4

22. Stochastic dynamic programming model for optimal resource allocation in vehicular ad hoc networks.
***Sādhanā, Academy Proceedings in Engineering Sciences*** *Journal, 43(4), 43-52, 2018*

23. Geographical angular zone-based optimal resource allocation and efficient routing protocols for vehicular ad hoc networks.
***IET Intelligent Transport Systems***, *12(3), 242-250.*

24. Rule-Based Anomaly Detection Technique using Roaming Honeypots for Wireless Sensor Networks
***ETRI Journal***, *pp.1145-1151, Vol.38, No.6, December 2016*

25. Load Balanced Clustering Technique in MANET using Genetic Algorithms
***Defence Science Journal(DESIDOC)***, *Vol. 66, No. 3, May 2016, pp. 251-258, DOI : 10.14429/dsj.66.9205*

26. Defense against Sybil attacks and authentication for anonymous location based routing in MANET
***The Journal of Mobile Communication, Computation and Information Springer***, *ISSN 1022-0038, DOI 10.1007/s11276-015-1178-7*

27. Development of a Secure Routing Protocol using Game Theory Model in Mobile Ad Hoc Networks
***Journal of Communications and Networks***, *Page No. 75 - 83, Vol.17, No.1, February 2015.*

28. Enhancing secure routing in Mobile Ad Hoc Networks using a Dynamic Bayesian Signalling Game Model
***(Elsevier) Journal of Computers and Electrical Engineering***, *Page No. 301 - 313, Vol.41, March 2015.*


*Paper Published in International/National Conferences: 41*
International peer-reviewed conferences/proceedings

1. ***Enhancing Security and Privacy Preserving of Data in Cloud Using SHA and Genetic Algorithm, Computational Intelligence in Pattern Recognition, Springer, Singapore,2021***

2. A Two-Level Authentication Protocol for Vehicular Adhoc Networks, ***International Conference on Information, Communication and Computing Technology. Springer 2019***

3. Statistical adaptive heuristic model supported driver intended destination and path prediction algorithm for

vehicular ad hoc network *2017 International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies*, IEEE 2017.

4.  Game Theoretical Approach for RSU Access with Minimum Payoff in VANET
    *International Conference on Business Analytics and Intelligence 2016, Indian Institute of Science, Bangalore, December 2016.*

5.  Augmented DTN based Energy Efficient Routing Protocol for Vehicular Ad hoc Networks
    *IEEE Sensors 2015, Busan, South Korea, November 2015.*

6.  A Novel Trust based Routing Algorithm for Mobile Ad hoc Networks
    *Information Technology: Yesterday, Today and Tomorrow, DRDO, DESIDOC, New Delhi, February2015.*

7.  Enhancing Energy Efficiency in Mobile Adhoc Network using Agglomerative Hierarchical Clustering Technique
    *A Scholarly Conference on Emerging Technologies for Information Systems (ASCENT 2015), Kuala Lumpur, Malaysia, March 2015.*

8.  Game Theoretical Computation based Energy Efficient Routing for Wireless Sensor Networks
    *International Conference on Eco-friendly Computing and Communication Systems, NITK, Mangalore, India, ISBN No.: 978-1-4799-7002-5, December 2014.*

9.  A Novel Secure Data Aggregation Model for Wireless Sensor Networks using Fuzzy Logic
    *IEEE Sensors 2012, Taipei, Taiwan, Page No. 4060-4070, Vol. 7, No.47, October 2012.*

10. Reliable & Energy aware next hop selection scheme for wireless Sensor Networks
    *IEEE International Conference on Advanced Computing, Anna University Chennai, India, December 2012.*

## Membership in Professional Societies

- Senior Member in Institution of Electrical and Electronics Engineers (IEEE), USA.
- Fellow of Institution of Engineers (IE), Kolkatta.
- Life member in Computer Society of India (CSI), Mumbai.
- Life Member in Indian Society for Technical Education (ISTE), New Delhi.
- Chapter chair of IEEE Information Theory Society Chapter, Madras Section.
- Advisor of IEEE Computer Society Student Chapter.

## Sponsored Conference/FDTP/Seminar/Workshop/Training Programme Organized (last 4 years)

| Programme Details | Sponsored Amt. (Rs.) |
|---|---|
| AICTE, New Delhi Sponsored National Level Seminar on "Research Trends and Innovations in Vehicular Networking and Intelligent Vehicular Communication" - 12.10.2017 and 13.10.2017 | *1,00,000/-* |
| CIIL Mysore Sponsored National Level Seminar on "Perspectives of HCI using Natural Language Processing" - 05.10.2016 – 07.10.2016 | *30,000/-* |
| ISTE Sponsored Seminar on "Natural Language Processing" - 22.09.2016 | *5,000/-* |
| IEEE-Information Theory Society (ITS) & NEC Science Maths Technology (SMT) Club jointly organized two days national level project exhibition PROEXPO'16 - 29.06.2016 and 30.06.2016 | *65,000/-* |
| INSA New Delhi Sponsored National Level Seminar on "Research Avenues in Speckled Computing and Speck nets - A Futuristic Pervasive Revolution"- 23.07.2016 & 24.07.2016 | *30,000/-* |
| IEEE ITS sponsored State level workshop "I-Smart" - 18.02.2016 & 19.02.2016 | *5,000/-* |
| DBT Sponsored National Level Seminar on "Affective Brain Computer Interface" - 08.01.2016 & 09.01.2016 | *50,000/-* |
| DST sponsored National Level workshop on "Advancements in Visual Sensor Network and its impact on public safety and security" - 08.01.2015 & 09.01.2015 | *30,000/-* |
| CRSI sponsored National Level Instructional workshop on "Formal Methods in Cryptography" -08.01.2015 & 09.01.2015 | *40,000/-* |
| EDI Gujarat Sponsored Three Days "Entrepreneurship Awareness Camp" - 29.12.2014 to 31.12.2014 | *60,000/-* |
| IEEE Madras Section sponsored workshop on "Digital Animation Techniques - ANIMATE" - 24.09.2014 – 25.09.2014 | *5,000/-* |
| ISTE-SRM University sponsored Short Term Training Programme on "High Speed Networks" -09.06.2014 to 16.06.2014 | *1,00,000/-* |
| DBT sponsored National Level Seminar on "Recent Advances and Emerging Trends in Life Science Research in BIOCLOUD: Bioinformatics using Cloud Computing Technologies" - 20.09.2013 & 21.09.2013 | *50,000/-* |
| DRDO sponsored National Level Seminar on "Language based Formal Methods and | *30,000/-* |

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|---|---|
| Verification Techniques for Security" - 02.08.2013 & 03.08.2013 | |
| Anna University Chennai sponsored one week Faculty Development Training Programme on "Theory of Computation" - 03.06.2013 to 10.06.13 | *80,000/-* |
| AICTE sponsored National Level Seminar on "A hands on training on Latex Essentials for Beginners" - 14.06.2013 & 15.06.2013 | 60,000/- |
| CISCO Systems India Pvt. Ltd., Sponsored a One day Cisco Academy Meet on "Emerging Trends in Green Networking Technologies" -08.03.2013 | *50,000/-* |
| IEEE, Madras Sponsored a Two day National Level FDP on "A Research Perspective issues on Human Computer Interaction = Ubiquitous + Pervasive + Haptic Technologies" - 30.11.2012 & 31.11.2012 | *25,000/-* |
| DAE-BRNS, Mumbai Sponsored a Two day National Level Seminar on "Research issues in Soft Computing Techniques for Nuclear Energy Systems" -28.09.2012 & 29.09.2012 | *60,000/-* |
| TNSCST Sponsored Two day Awareness Programme on "Digital Animation Technologies" - 23.08.2012 & 24.08.2012 | *20,000/-* |
| CSIR Sponsored a Two day National Level Seminar on "Semantic Information Retrieval from Medical Databases for Clinical Decision Support Systems" - 06.04.2012 & 07.04.2012 | *30,000/-* |
| NBHM Sponsored a Two day National Level Seminar on "Game Theoretical Models for Problem solving in Wireless Networks" - 20.01.2012 & 21.01.2012 | *48,000/-* |
| BRNS Sponsored a Two day National Level Seminar on "Research issues in Computer Simulation and Modeling for Advanced Nuclear Energy Systems" - 15.07.2011 & 16.07.2011 | *60,000/-* |
| DRDO Sponsored a Two day National Level Seminar on "Research Challenges and Trends in intelligent web for information Retrieval" - 18.03.2011 & 19.03.2011 | *35,000/-* |
| DST Sponsored a Two day National Level Seminar on "New Fangled Architecture - Spawning Network" - 18.02.2011 & 19.02.2011 | *50,000/-* |
| CSIR Sponsored a Two day National Level Seminar on "Research Issues in Wearable Computing"- 28.01.2011 & 29.01.2011 | *30,000/-* |
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| *International Conference Organized* | |
| IEEE International conference on "Computing and Intelligent Data Engineering (ICCTIDE 2016)" - 07.01.2016 to 09.01.2016<br>• Conference Technically Sponsored by<br>  o IEEE Madras Section<br>  o IEEE Computer Society<br>  o IEEE Information Theory Society<br>• Conference Financially Sponsored by<br>  o BRNS New Delhi<br>  o Tata Consultancy Services (TCS), Chennai<br>  o ISRO New Delhi<br>  o DBT New Delhi<br>• Fund Generated from GO and NGO Selected papers published in IEEE Digital Xplore.<br>• Selected papers published in Annexure – II Journal.<br>• More than 15 international experts and 50 national experts involved on face and off<br>• face. | *2,60,000/-* |

## Other FDTP/Seminar/Instructional course Organized (last 4 years)

- Anna University Chennai approved one week Faculty Development Training Programme on "Theory of Computation".
- Anna University Chennai approved one week Faculty Development Training Programme on "Mobile and Pervasive Computing" - 11.06.14 to 18.06.14.
- IARCS technically sponsored two days instructional course on "Computational Complexity" - 27.09.2013 & 28.09.2013.
- A self sponsored technical seminar on "Imaging Arithmetic: Physics U Maths > Physics + Maths" delivered by Dr. Gaurav Sharma, Professor, Department of Electrical and Computer Engineering, University of Rochester, USA. - 29.08.2012.

## Reviewer for Journal

- IEEE Sensors Journal, United States (IF:1.85).
- Computing and Informatics Journal, Slovakia, Europe (IF:1.254).
- Computer Networks and Communications, United States (IF:1.12).

- The Computer Journal, United Kingdom (IF:0.88).
- Security and Communication Networks Journal, Singapore (IF:0.433)

## Member in Technical, Programme, Advisory and Review Committee

- Reviewer in International Conference on Engineering and Technology, 2018 (ICETECH18) Rathinam Technical Campus 14th and 15th March 2018.
- Advisory member and Reviewer for a fourth International Conference on Science Technology Engineering and Management (ICON STEM 2018) on March 23 & 24, 2018, Jeppiaar Engineering College, Chennai.
- Advisory/Technical member in International Conference on Advances in Energy-efficient Computing and Communication (ICAECC-2018) on 1st and 2nd March 2018, St. Xavier's Catholic College of Engineering, Kanniyakumari.
- Technical/Advisory Committee in International conferencece on "Vision Towards Emerging Trends in Communication and Networking (ViTECoN-2018)" during March 24-25, 2018. VITECON-2018, VIT University, Vellore
- 2nd IEEE International Conference on Soft-computing and Network Security (ICSNS 2018) during Feb. 14-16, 2018, SNS College of Technology, Coimbatore.
- Technical Advisory Committee member and Reviewer in Fourth International Conference on "Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB'18)" during 27th and 28th February 2018, Prathyusha Engineering College, Chennai.
- Advisory committee Member in sixth National Power Engineering Conference (NPEC-18) organized by Department of EEE,TCE Madurai during March 2018 in association with IEEE Podhigai subsection.
- Member in Advisory and Technical Committee in IEEE international Conference 2018, Rajalakshmi Institute of Technology, Chennai.
- Technical Review Committee Member in International Conference on "Information Engineering, Management and Security (ICIEMS 2015)" organized by IITM Research Park, Chennai on 19.12.2015.
- Programme Committee Member in International Conference on "Frontiers of Internet of Things (FIT 2014)" held at Taiwan during 04.12.2014 to 06.12.2014.
- Programme Committee Member in International Workshop on "Big Data Analytics for BioSecurity 2015" organized by CSIRO, Australia during 13.04.2015 to 17.04.2015.
- Technical Committee Member in 4th International Conference on "Wireless and Optical Communications" to be held at Chengdu, China during 06.06.2015 to 07.06.2015.
- Advisory Member for a International Journal of Recent Advances in Science and Engineering (ISRASE), Karnataka, India.

## Position Hold

- **EXECOM (Executive Committee) Member**
  - IEEE Madras Section Chennai for the period of 2014-2016 and 2016-2018.
- **Recognised PhD Supervisor**
  - Anna University Chennai, Manonmaniam Sundaranar University Tirunelveli and Bharathiyar University Coimbatore.
  - No. of scholars completed PhD: 13
    - 7 scholars under Manonmaniam Sundaranar University Tirunelveli.
    - 6 scholars under Anna University Chennai.
  - No. of scholars pursuing PhD: 10
    - under Anna University Chennai
- **Doctoral Committee Member and Expert Member for Thesis Correction**
  - Anna University Chennai, Manonmaniam Sundaranar University Tirunelveli and Bharathiyar University Coimbatore.
- **Board of Studies Expert Member**
  - In couple of Autonomous Engineering Colleges to formulate the curriculum and syllabus of Computer Science and Engineering Programme.

## Outside World Interaction and Travel Grant Received

- Countries Visited: Taiwan, Dubai, Hong Kong, South Korea and Canada.
- Attended a international conference "IEEE Panel of Conference Organizers (POCO)" as a hosted attendee from Region 10, IEEE Madras Section held at Montreal, Canada from 28.07.2016 to 30.07.2016.

## Travel Grant

- UGC New Delhi Sanctioned full travel grant amount for presentation of a research paper entitled "Augmented DTN based Energy Efficient Routing Protocol for Vehicular Ad hoc Networks" in the international conference IEEE Sensors 2015 held at Bexco, Busan, South Korea during 01.11.2015 to 04.11.2015.
- Received a travel grant from DST, New Delhi of Rs.58,950/- for presentation of a research paper entitled "A novel secure data aggregation model for wireless sensor networks using fuzzy logic" in the international conference of IEEE SENSORS 2012 held at Taipei, Taiwan during 28.10.2012 to 31.10.2012.

Signature