PROFILE

Dr. B. VANI M.Sc., M.Phil., PGDCA., Ph.D.,

SUMMARY

About two and half decades of experience in teaching at various educational institutions for UG and PG courses and had guided 25 M.Phil research scholars. Awarded Ph.D degree in Computer Science on December 2013 and had published 24 International Journal/Conference papers with high impact factors which includes Scopus, Web of Science and UGC Care. Guided more than 25 M.Phil scholars under Bharathidasan and Mother Teresa Women's University and guiding 2 scholars.

PROFESSIONAL EXPERIENCE:

Twenty-three years of Professional Experience starts with Holy Cross College as Lecturer in the Department of Computer Science, Assistant Professor in the Department of Computer Science and Engineering in Bharathidasan University, Assistant Professor in the Dept. of Computer Science, Srimad Andavan Arts and Science College and six years of designing research projects as Director in SR Research Academy with collaborations and as Assistant Professor in the Department of Data Science, Holy Cross College, Trichy.

- Approved for the post of Assistant Professor in Computer Science as per the UGC norms on 26.02.2014 from Bharathidasan University.
- **Research Advisor (Ph.D)** in Bharathidasan University in Computer Science, 2015
- Approved RA in **M.Phil** Computer Science in the year 2009 and had guided 22 M.Phil research scholars.
- Awarded **NPTEL-AICTE**, "Faculty Development Programme", certificate on "**Python for Data Science**", July-August 2022, offered by IIT Chennai.
- **Reviewer** in Asian Journal of Mathematics and Research, British journal of Applied Science and Technology, Journal of Basic and Applied Research International, UK.
- Acted as **chairman** in question paper setting for Periyar University, Salem.
- Doctoral Committee Member, Examiner and question paper setter in Bharathidasan University, St. Joseph's College, Holy Cross College, Bishop Heber College, Trichy.
  ICSSR – Minor Project and Two patents under process
- Acting as **Innovation Ambassador (Advanced level)** and giving training to students on Innovation and Entrepreneurship as IIC in-charge

Books/ E-Contents/ Materials authored:

Authored Book titled "Research Areas in Data Analytics", 2022, Holy Cross College Publications, authored Book titled "Software Testing" and Data Science Projects on Machine Learning and Deep Learning and editor for Books and Proceedings.

MERITS:

Secured I Rank in the college for both B.Sc (Physics) and PGDCA, Awarded **"The Best Outgone"** student with **Gold Medal** and Secured **I rank in X standard** at school level.

Title of the Ph.D Thesis: Design of Medium Access Control Layer Security Algorithms to Detect and Prevent Denial of Service Attacks in WLAN

Papers published with citation index: **Twenty-Four** papers

Publications Level	List of publications	Citations	H-index	i 10 index
National	6			
International	18	63	5	2
Total	24	63	**5**	**2**

Refer Google Scholar citation index

Please Refer Annexure -I

<u>**Annexure -I**</u>

LIST OF PAPERS PUBLISHED/INTERNATIONAL: 20

INTERNATIONAL JOURNALS: 16

1. **B. Vani**, L. Arockiam, "A Performance Analysis of WEP and WPA2 Protocols to Ensure WLAN Security", CiiT Journal on Wireless Communication, March 2010, DOI: WC032010009 ISSN 0974 – 9756 (print), ISSN 0974 – 9640 (online).(**Impact Factor 0.532).**

2. L. Arockiam, **B.Vani,** "A Survey of Denial of Service Attacks and it's Countermeasures on Wireless Network", International Journal on Computer Science and Engineering, Vol. 02, No. 05, August 2010, ISSN 0975-3397, pp. 1563-1571. **UGC CARE** - [**IF - 3.8**]]

3. L. Arockiam, **B. Vani,** "A comparative study of the available solutions to minimize Denial of Service attacks in Wireless LAN", International Journal on Computer Technology and Applications, Vol.2(3), ISSN 2229-6093, pp. 619-625, 2011. (**Impact Factor 2.015**) [Citation 6].

4. **B. Vani**, L. Arockiam, "Inhibition of Denial of Service attacks in WLAN using Integrated Central Manager", International Journal on Computer Applications, Vol. 29, No. 8, ISSN 0975-8887, September 2011, pp. 28-33.(**Impact Factor 0.814).** [Citation 5].

5. **B. Vani**, L. Arockiam, " A solution to prevent resource flooding DoS attacks in 802.11 WLAN", **Springer Verlog Berlin Hedeinberg**, Obcom, part I, CCIS Vol. 269, ISSN: 1865-0929, pp. 607-616, 2012. [Citation 6].

6. L. Arockiam, **B. Vani**, "Security algorithms to prevent Denial of Service (DoS) attacks in WLAN", International Journal on Wireless Communications and Networking Technologies, WARSE journals, Vol. 2, No. 1, ISSN- 2319-6629, pp. 1-7, December 2012-January 2013 (**Impact Factor 0.544**).

7. L. Arockiam, **B. Vani**, "MAC Spoof Detection and Prevention Algorithm (MAC SDP - DoS) for Spoofing Attacks in WLAN 802.11", International Journal of Computer Science, Information Technology and Security, IRACST, Vol. 3, No. 2, April, 2013, ISSN: 2249-9555 (Online), 2250-1355 (Print), pp. 165-171, (**Impact Factor 0.310).**

8. L. Arockiam, **B. Vani**, "Framework to Detect and Prevent Medium Access Control Layer Denial of Service Attacks in WLAN", International Journal of Computer Networks and Wireless Communication, IRACST, Vol. 3, No. 2, April 2013, ISSN: 2250-3501 (Online), 2277-5307 (Print), pp. 152-159, (**Impact Factor 0.421).**

9. **B. Vani**, "A Survey on the Security Issues in Cloud Computing", International Journal of P2P Network Trends and Technology (IJPTT) – Volume 11, Sep 2014, ISSN: 2249-2615, pp-16-19. (**Global Impact Factor (GIF) value - 1.06)**

10. **B. Vani**, "Availability in Cloud Computing", International Journal of Innovative Research in Information Security (IJIRIS), Issue 2, Volume 4, (April 2015), ISSN: 2349-7017(O), ISSN: 2349-7009(P), pp. 11-15, (I**mpact Factor 4.3).**

11. **B. Vani**, " A Survey on Big data and its Characteristics", International Journal of Engineering Research & Technology (IJERT), NCICCT-2015 Conference Proceedings, Issue 2, ISSN: 22278-0181.

12. **Dr.B.Vani,** "A Survey on Recent Research Areas in Computer Science", International Journal of Advanced Engineering, Management and Science (IJAEMS), Vol-2, Issue-7, July-2016, Infogain Publication (Infogainpublication.com) ISSN : 2454-1311, pp. 1167-1171, (I**mpact Factor 7.4).**

13. **Dr.B. Vani**, "Discovering the Diagnosis of Diabetes mellitus by using Association Rule Mining", International Journal of Research Instinct, August 2016.

14. **Dr. B.Vani, et.al.,** "Efficiency Based Auction Framework For Access Control Mechanism For Manet", International Journal of Research Instinct, August 2016, Vol 3 (Issue 2)., pp.664-671.

15. Dr. B. Vani, C. Naveen Kumar, "Design and Implementation of Job Recommendation Application 'Jobs-3600' for Job Seekers and Employers using Flutter". International Journal of Advanced Engineering, Management and Science (ISSN: 2454-1311),vol 8, no. 6, 2022, pp.06-13 Infogain Publication, doi:10.22161/ijaems.86.2.

16. Dr. B. Vani et al. "Flood Disaster Prediction and management with the best Machine Learning Algorithms", International Journal of Computer Networks and Wireless Communication, IRACST, Web of Science, (Approved for Publication)

INTERNATIONAL CONFERENCES: 2

17. **B. Vani**, S. Revathi, L. Arockiam, "A Comparative Analysis of AES and RC4 Encryption Algorithms on Wireless Security", Proceedings of International Conference on Advanced Computing (ICAC), Tamil Nadu, India, August 2009, pp 380-385, ISBN10 0230-63915-1, ISBN13 978-0230-63915-7.

18. **B. Vani**, L. Arockiam, B. Sivagowry, A. Persia, " A solution to prevent resource flooding DoS attacks in 802.11 WLAN", Obcom, Vellore Institute of Technology, part I, **Springer** Communications in Computing and Communication Systems, Vol. 269, ISBN 978-3-642-29218-7, pp. 607-616, 2012.

NATIONAL CONFERENCES: 6

19. **B. Vani**, L. Arockiam, National Conference on Advanced Computing and IT Applications (NCACITA), KGiSL Institute of Information Management, Coimbatore, "A Comparative Study of the Existing Solutions to Avoid Denial of Service Attacks in WLAN", 18th Feb'2011 with ISBN and ISSN numbers.

20. **B. Vani**, L. Arockiam, National Conference on Emerging Trends in Advanced Computing (NCETAC '2010 at Jayaram College of Engg., Trichy. Published a paper titled "A study of Host Based Intrusion Detection System", with ISBN: 978-81-910212-0-2.

21. **B. Vani**, L. Arockiam, "Ethical values based curriculum development to enhance mobile security", National conference on Advanced Computing, Holy Cross College, Trichy, 2010.

22. **B. Vani**, L. Arockiam, "A Comparative Study of Optical Character Recognition for Printed and Handwritten Tamil Text", National Conference on Tamil Computing, Bharathidasan University, Trichy, October 2010.

23. **B. Vani**, " Mobile Cloud: Security Issues and Challenges", National Conference on Advances in Mobile Technologies", Srimad Andavan Arts and Science College, Trichy, September, 2013, ISBN: 97881908400-2-6,

24. **B. Vani**, "A Study on the Intrusion Detection Techniques and the best security measures", National Conference on Computer Science and Communication Technology, NCSCT 2007, St. Joseph's College, Trichy.

Conferences/ Seminars organized: 9

1. Organized an International Seminar on " Research Areas in Data Analytics and Security", 2023, Department of Data Science at Holy Cross college, Trichy.
2. Organized a State Level Seminar on Recent Research Trends in Computer Science at Srimad Andavan Arts and Science College, Trichy on 29th October 2015.
3. Organized a National Conference on Advances in Mobile Technologies at Srimad Andavan Arts and Science College, Trichy on September 2013 and acted as editor in releasing the conference proceedings.
4. Organized a Seminar on Research Trends for M.Phil and Ph.D Scholars, Department of Computer Science and Engg., BDU, April 2010
5. Organized one International Conference on Advanced Computing ICAC 09 at BUTP, Trichy.
6. Organized a National Seminar on Animation Based Gaming, Entertainment Computing & Education, 13th & 14th March 2009 by BUTP and Shrimathi Indira Gandhi College, Trichy.
7. Organized a National Level Conference on Frontier Research areas in Computing Sciences, Department of computer science, BDU, Trichy, October 2007.
8. Organized and participated in the Second National Seminar on Information Technology, Department of Computer Science, BDU, Trichy, Feb'2007.
9. Organized four National and International level symposiums at Dept. of Computer Science and Engg., BDU, Trichy.
10. Organized the National Conference on Tamil Computing NCTC 2010 at Dept. Computer Science and Engineering, Bharathidasan University, Trichy, October 2010.

Conferences/Seminars/Workshops/FDP attended:

1. International Conference on World Congress on Computing and Communication Technologies (WCCCT'14) at St. Joseph's College, Trichy on March 2014.
2. A National Seminar on "Impact of e-Technology on Teaching, learning and Evaluation" (Reach, Reflect & Reckon) on 12th March 2016.
3. A workshop on "C sharp" by ICT-ACT at BUTP, April 2010.
4. National Conference on Frontier Research Areas of Computer Science held at Holy Cross College for Women, Trichy-2, Feb'09
5. A workshop on "Security day 09" of Smart and Secure Environment Project at NIT Trichy, Sep'09
6. Workshop on "Open Source Software" at BUTP, Trichy.   (23.01.2008- 24.01.2008)
7. IGNOU – DEC Workshop on E-Content CDE, BDU, Trichy, 10.06.08 to 12.06.08
8. IGNOU – DEC workshop for Lesson Writers on SIM format, CDE, BDU, Trichy, 27.11.07 to 29.11.07
9. Participated in the workshop on "Emerging Issues in Information Security" by Dept. of Mathematics and Computer Applications, National Institute of Technology, Trichy, Apr'2007

10. Participated – International Networking of Human Resource Industry and Technology, Holy Cross College, Trichy – 2, Jan'2001 (INHRIT)

11. FDP on "Blended and Inclusive Strategies in AI and ML", PG Dept. of Computer Science, 18th to 22nd October 2021, Holy Cross College, Trichy – 2.

12. Participated in Faculty Development Program on " AI in Business ", organized by Department of Data Science, St. Joseph's College, Trichy on 11.01.2022

13. Participated in a one day International Online Faculty Development Program On "TECHNOLOGIES FOR THE NEW ERA" Organized by Innova Club - Department of Information Technology, Cauvery College for Women (Autonomous), Trichy on 22nd January 2022.

14. Participated in the Faculty Development Programme on "Augmented and Virtual Reality- A Hands on Session" on February 10, Holy Cross College(Autonomous), Trichy, 2022.

15. One Day Virtual National Seminar on "MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE IN PANDEMIC ERA" on 22nd April 2022, Sponsored by TANSCHE (TAMILNADU STATE COUNCIL FOR HIGHER EDUCATION) at HolyCross College, Trichy – 2.

16. Attended a Faculty Development Programme on "The Nuances of Scientific Writing and Publishing", from 11th to 19th July 2022, All India Association for Christian Higher Education, New Delhi and Madras Christian college, Chennai.

17. Attended a Faculty Development Programme One-Week Online National Faculty Development Program jointly organized by Holy Cross College, Tiruchiappalli and Guru Angad Dev Teaching Learning Centre under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education, SGTB Khalsa College, University of Delhi with a A graded