FACULTY PROFILE

1. Name of the Faculty : V.R.Sarma Dhulipala

2. Department and Designation : Department of Physics

3. Date of Joining : 2012-Present

4. Faculty ID :TF0103

5. E-mail Address : dvrsarma@gmail.com

6. Date of Birth : 26.06.1976

7. Qualification:

Ph.D., (Wireless Sensor Networks) from Anna University, Chennai (2013);

M.Phil (Physics) from JNT University, Hyderabad (2006);

M.Sc., (Electronics) from Andhra University (2000);

B.Sc., (Electronics) from Andhra University (1997);

WebLink: GoogleScholar
http://scholar.google.co.in/citations?user=ip7QAosAAAAJ&hl=en&oi=ao

Web Link: Research gate
https://www.researchgate.net/profile/Vrsarma_Dhulipala2?ev=hdr_xprf

8. Specialization : Wireless Sensor Networks, Mobile Ad hoc Networks, Body Sensor Networks

9. Professional Experience   :

Assistant Professor (2012-Present): Anna University, BIT Campus, Tiruchirappalli.

Assistant Professor (2009 – 2012): Anna University of Technology, Tiruchirappalli.

Lecturer (2008-2009): Anna University, Tiruchirappalli**.**

Teaching Research Associate (2007-2008): Anna University, Tiruchirappalli.

Assistant Professor (2000-2007): Maharajah's PG Courses, Vizianagaram, Andhra Pradesh.

10. Research Guidance:

Number of Post Graduate Projects Guided: 62

Ph.D Awarded: 01

PhDs in Progress: 09

11. Awards and Honours:

➢ Guest Editor for the Special issue titled "Communication and Health Monitoring based Modeling and Simulation using Wireless Sensor Networks" in ICTACT Journal of Communication Technology (http://ictactjournals.in/SpecialIssues/Sarma_Dhulipala.htm)

➢ Editorial Board Member for Journal of Communications Engineering and Networks (http://www.bowenpublishing.com/jcen/EditorialBoard.aspx)

➢ Reviewer for Defense Science Journal (DSJ)

➢ Reviewer for **IEEE** Sensors Journal

➢ Reviewer for International Journal of Information and Communication Technologies by Inderscience.

➢ International Programme Committee member for ICACCI – 2013 Reviewer for Elsevier's Journal of Systems and Software.

➢ Reviewer for Ad hoc Wireless Sensor Networks, Old City Publishing House.

- ➢ Reviewer for a **Springer Journal of Wireless Personal Communications**.

- ➢ Reviewer for **WSEAS Transactions of Communication**.

- ➢ Reviewer for **Springer Journal of Zhejiang University of Computer Science and Electronics.**

- ➢ Editorial Member for **International Journal of Computer Networks (IJCN)** by ACEEE (US Division) from 2009 to 2012.

12. Sponsored Projects:

Sl.No	Name of the Project	Funding Agency	Amount	Participation	status
1.	**Mobile Phone Sensing** Mechanism For Stress Relaxation Using Wireless Sensor Networks	TNSCST	Rs: 10,000.00	SPS	Completed

13. Patents:

S.NO	C.BR.NO	DOCKET NO	Application Number
AN APPARATUS AND A METHOD FOR MONITORING SMART CITIES THROUGH INTERNET OF THINGS ENABLED ENVIRONMENT			
1.	29635	:58265	201741032954

14. Publications:

(i) Internationally Refereed Journals (ii) National Journals:

1) **Dhulipala, VR Sarma**, and N. Karthik. "Trust management technique in wireless sensor networks: challenges and issues for reliable communication: a review." CSI Transactions on ICT 5.3 (2017): 281-294.

2) Baskar, S., and **V. R. Dhulipala**. **"**Biomedical Rehabilitation Data Error Detection And Correction Using Two Dimensional LFSR Based Cyclic Redundancy Check Method" in Journal of Medical Imaging and Health Informatics(17**-1843-R** Anna University **Annexure-1 and SCIE-** in press)

3) Baskar, S., and **V. R. Dhulipala**. **"**Secure and compact implementation of optimized montgomery multiplier based elliptic curve cryptography (ECC) on FPGA with road vehicular traffic collecting (RVTC) protocol for VANET application" in International Journal of Heavy Vehicle Systems. (IJHVS-199655- Anna University **Annexure-1 and SCIE-** in press)

4) Baskar, S., and **V. R. Dhulipala**. "Comparative Analysis on Fault Tolerant Techniques for Memory Cells in Wireless Sensor Devices." Asian Journal of Research in Social Sciences and Humanities 6.cs1 (2016): 519-528.

5) **Dhulipala, VR Sarma**, Prathima Devadas, and PHS Tejo Murthy. "Mobile Phone Sensing Mechanism for Stress Relaxation using Sensor Networks: A Survey." Wireless Personal Communications86.2 (2016): 1013-1022.

6) **Dhulipala, VR Sarma**, Prathima Devadas, and PHS Tejo Murthy. "Mobile Phone Sensing Mechanism for Stress Relaxation using Sensor Networks: A Survey." Wireless Personal Communications86.2 (2016): 1013-1022.

7) **V R Sarma Dhulipala**, Prathima Devadas and P H S Tejo Murthy, 'Mobile Phone Sensing Mechanism for Stress Relaxation Using Sensor Networks : A Survey', Wireless Personal Communications, 2015, 1–10

8) **V.R.Sarma Dhulipala** and M. S. Udhaya. "Secure health assistance in a ward–based pervasive environment." International Journal of Telemedicine and Clinical Practices 1.1 (2015): 64-76

9) **V.R.Sarma Dhulipala** and M.S.Udhaya, "Secure Health Assistance in a Ward based Pervasive Environment" (Accepted for Publication in International Journal of Telemedicine and Clinical Practices by Inderscience Publishers)

10) **V.R.Sarma Dhulipala** and G.R.Kanagachidambaresan, "Cardiac Care Assistance using Self Configured Sensor Network - A Remote Patient Monitoring System", Springer Journal of Institute of Engineers-India-B, 95:2 (2014):101-106.

11) **V. R. Sarma Dhulipala**, N. Karthik, and RM. Chandrasekaran. "A Novel Heuristic Approach Based Trust Worthy Architecture for Wireless Sensor Networks." Wireless Personal Communications (2012): 1-17.

12) Arivubrakan, P., and **V. R. Sarma Dhulipala**. "Sentry Based Intruder Detection Technique for Wireless Sensor Networks." Journal of Artificial Intelligence 6 (2013): 175-180.

13) Bhuvaneswari, E., and **V.R.Sarma Dhulipala,**"The Study and Analysis of Classification Algorithm for Animal Kingdom Dataset", Information Engineering 2:1(2013):6-13

14) Manojprabu, M., and **V.R. Sarma Dhulipala**, "Wireless Physiological Parameter Monitoring and Recording System.", IOSR Journal of Electronics and Communication Engineering , 5:1 (2013): 25-35.

15) **V.R. Sarma Dhulipala**, G. R. Kanagachidambaresan, and R. M. Chandrasekaran. "Lack of Power Avoidance: A Fault Classification Based Fault Tolerant Framework Solution for Lifetime Enhancement and Reliable Communication in Wireless Sensor Networks." Information Technology Journal 11 (2012): 719-724.

16) Christy, Fleena, and **V.R. Sarma Dhulipala,** "Analysis of Selective Routing Strategies for Fault Tolerance in Wireless Sensor Networks." International Journal on Computer Science and Engineering 4:5 (2012): PP 749-755.

17) Revathi, G., **V.R. Sarma Dhulipala**, and G. R. Kanagachidambaresan. "Intelligent Decision Making System for Car Parking." International Journal of Computer Applications 37.9 (2012): 5-9.

18) Arivubrakan, P., and **V.R. Sarma Dhulipala**. "QoS Enhancement by varying Transmission Range in Wireless Ad-hoc Networks." International Journal of Computer Applications 37.9 (2012): 1-4.

19) Saravanan, D., R. M. Chandrasekaran, B. Vishnu Prabha, and **V.R. Sarma Dhulipala**. "Trust Worthy Architecture Implementation for Mobile Ad hoc Networks." International Journal on Computer Science and Engineering 3, no. 7 (2011): 2601-2609.

20) Kanagachidambaresan, G.R., **V.R.Sarma Dhulipala**, and Vanusha, D., "Pervasive computing based healthcare using body sensor networks", Elixir Adoc Network 40 (2011): 5442-5446.

21) Janani, K., **V.R. Sarma Dhulipala**, and N.Prabakaran. " SAHMS-Scatternet Assisted Health Monitoring System". International Journal of Emerging Technology and Advanced Engineering 2.3(2012): 90-96.

22) Malany, A. Boomarani, **V.R. Sarma Dhulipala**, and R. M. Chandrasekaran. "Throughput and Delay Comparison of MANET Routing Protocols." Int. J. Open Problems Compt. Math 2.3 (2009).

23) Sivaraman, R., **V.R. Sarma Dhulipala**, V. Aarthy, and K. Kavitha. "Energy comparison and Analysis for Cluster Based Environment in Wireless Sensor Networks." International Journal of Recent Trends in Engineering 2, no. 4 (2009): 89-91.

24) Sivaraman, R., **V.R. Sarma Dhulipala**, L. Sowbhagya, and B. Vishnu Prabha. "Comparative Analysis of QoS Metrics in Mobile Ad Hoc Network Environment." International Journal of Recent Trends in Engineering 2, no. 4 (2009).

25) **V.R. Sarma Dhulipala**, R. M. Chandrasekaran, and R. Prabakaran. "Timing Analysis and Repeatability Issues of Mobile Adhoc Networking Application Traffics in Large Scale Scenarios." International Journal on Recent Trends in Engineering (IJRTE), Academy Publishers 1.1 (2009).

26) Sheela, M. Shahaya, A. Sivanantha Raja, and **V. R. Sarma Dhulipala**. "Parametric Analysis of Mobile Ad-Hoc Network Environment." International Journal of Computer Applications IJCA 9.9 (2010): 24-28.

Book Chapters:

1) Kanagachidambaresan, G. R., **V. R. Sarma Dhulipala**, D. Vanusha, and M. S. Udhaya. "Matlab Based Modelling of Body Sensor Network Using
   a. ZigBee Protocol." Computational Intelligence and Information Technology

(2011): 773-776. (Springer Book Series)

2) **V.R. Sarma Dhulipala**, V. Aarthy, and R. M. Chandrasekaran. "Energy and fault aware management framework for wireless sensor network." Information Processing and Management (2010): 461-464. (Springer Book Series)

3) **V.R. Sarma Dhulipala**, B. Vishnu Prabha, and R. M. Chandrasekaran. "Trust Worthy Architecture for Mobile Ad Hoc Network Environment." Information Processing and Management (2010): 557-560. (Springer Book Series)

4) **V.R. Sarma Dhulipala**, K. Kavitha, and R. M. Chandrasekaran. "A Cross Layer Approach for Fault Management Framework in Wireless Sensor Networks." Information Processing and Management (2010): 561-564.

5) Aarthy, M. P. A., M. Shanmugaraj, and **V.R. Sarma Dhulipala**. "Energy Consumption Analysis of Multicast Routing Protocols in Wireless Ad Hoc Network Environment." Computer Networks and Information Technologies (2011): 412-414.

(iii) International Conferences and National Conferences:

1) Kumar, K. Nirmal, **V.R. Sarma Dhulipala**, R. Prabakaran, and P. Ranjith. "Future sensors and utilization of sensors in chemical industries with control of environmental hazards." In 2nd International Conference on Environmental Science and Development IPCBEE, IACSIT Press, Singapore, vol. 4, pp. 224-228. 2011.

2) Raja, B. Shanmuga, N. Prabakaran, and **V.R. Sarma Dhulipala**. "Modified GPSR Based Optimal Routing Algorithm for Reliable Communication in WSNs." Devices and Communications (ICDeCom), 2011 International Conference on. IEEE, 2011.

3) Karthik, N., and **V.R. Sarma Dhulipala**. "Trust calculation in wireless sensor networks." Electronics Computer Technology (ICECT), 2011 3rd International Conference on. Vol. 4. IEEE, 2011.

4) Janani, K., **V. R. Sarma Dhulipala**, and R. M. Chandrasekaran. "A WSN Based Framework for Human Health Monitoring." Devices and Communications (ICDeCom), 2011 International Conference on. IEEE, 2011.

5) Shanmugaraj, M., R. Prabakaran, and **V. R. Ssarma Dhulipala**. "Industrial utilization of wireless sensor networks." Emerging Trends in Electrical and Computer Technology (ICETECT), 2011 International Conference on. IEEE, 2011.

6) Arulmozhi, K., **V.R. Sarma Dhulipala**, and R. Prabakaran. "A study on optimized power consumption routing in Wireless Sensor Networks." Electronics Computer Technology (ICECT), 2011 3rd International Conference on. Vol. 3. IEEE, 2011.

7) Uma, B., and **V.R. Sarma Dhulipala**. "MAC Vs Routing Protocols in Mobile Adhoc Network." IJCA Proceedings on International Conference on VLSI, Communications and Instrumentation (ICVCI)}.

8) Arivubrakan, P., and **V.R. Sarma Dhulipala**. "Energy consumption heuristics in wireless sensor networks." Computing, Communication and Applications (ICCCA), 2012 International Conference on. IEEE, 2012.

9) Kanagachidambaresan, G. R., **V. R. Sarma Dhulipala**, and M. S. Udhaya. "Markovian Model based Trustworthy Architecture." Elsevier Procedia Engineering 30 (2012): 718-725.

10) Revathi, G., and **V.R. Sarma Dhulipala**. "Smart parking systems and sensors: A survey." Computing, Communication and Applications (ICCCA), 2012 International Conference on. IEEE, 2012.

11) Aarthy, M. P. A. M., and **V. R. Sarma Dhulipala**. "Energy conservation at node level using a wake-up scheme in Wireless Sensor Networks." Emerging Trends in Electrical and Computer Technology (ICETECT), 2011 International Conference on. IEEE, 2011.

12) Vallimayil, A., **V. R. Sarma Dhulipala**, K. M. K. Raghunath, and R. M. Chandrasekaran. "Role of relay node in Wireless Sensor Network: A survey." In Electronics Computer Technology (ICECT), 2011 3rd International Conference on, vol. 5, pp. 160-167. IEEE, 2011.

13) Pushpa, R. A., A. Vallimayil, and **V. R. Sarma Dhulipala**. "Impact of mobility models on mobile sensor networks." Electronics Computer Technology (ICECT), 2011 3rd International Conference on. Vol. 4. IEEE, 2011.

14) Prabakaran, N., B. S. Raja, R. Prabakaran, and **V. R. Sarma Dhulipala**. "Rate Optimization Scheme for Node Level Congestion in Wireless Sensor Networks." In Devices and Communications (ICDeCom), 2011 International Conference on, pp. 1-5. IEEE, 2011.

14. CONFERENCES/WORKSHOPS/SEMINAR/ SHORT TERM REFRESHER COURSE ATTENDED:

1) Participated in TEQIP-II Sponsored 3-Day Residential Programme in Essentials of Embedded Systems and Their Applications at Gem Park Hotel, Ooty from 5-7 March 2014.

2) Attended One Day workshop on R&D Proposals conducted by CTDT, Anna University, Chennai on 28-06-2013.

3) Participated in UGC sponsored 78th Orientation Programme from 01.02.2013 to 28.02.2013 at UGC Academic Staff College, Bharathidasan University, Tiruchirappalli.

4) Participated in a 3-week refresher courses on "VLSI design and Embedded systems" sponsored by UGC at ASC, JNT University, Hyd in Nov-Dec 2004.

5) Attended a short term course on "Embedded systems and Technology" at IIT, Kharagpur in April,2005

6) Participated in "National Space Science Symposium", NSSS-2006 sponsored by ISRO at Andhra University, Visakhapatnam in February, 2006.

7) Attended a short term training program on "8051 Microcontroller" at MVGR College of Engg, VZM in May, 2006.

8) Attended a Quality Improvement program on "Instructional Design and Delivery" conducted by NITTTR, Min of HR at MVGR College of Engg, VZM in June 2006.

9) Attended a workshop on "Mixed Signal Processing and Recent Advances in Electronics" conducted by USIC, Andhra university in Nov,2006.

10) Attended a faculty interaction meet on "Keeping Pace with Advanced Technology" conducted by IGIAT at Visakhapatnam in November,2006

11) Attended a Orientation course on "Internet Technologies" sponsored by UGC at ASC, JNT University, Hyderabad in January, 2007.

12) Attended a work shop on "Low Power VLSI Design" conducted by USIC, Andhra University in February, 2007.

13) Attended a three day work shop on "Service Oriented Architecture" conducted by Anna University Tiruchirappalli.

14) Attended a one day work shop on "NS2-Network Simulator" conducted by Anna University Tiruchirappalli.

15) Attended a one day work shop on "Fault tolerant systems" conducted by National Institute of Technology, Tiruchirappalli, Tamil Nadu, India.

15. CONFERENCES/WORKSHOPS/SEMINAR ORGANISED:

1) Coordinator for TEQIP – II Sponsored two day national workshop on "Optoelectronics and Advanced Materials", Dept of Physics, Anna University, BIT Campus, Tiruchirappalli.

2) Co-Coordinator for TEQIP-II Sponsored Two Day National Seminar on "Advances in Engineering Materials", Dept of Physics, Anna University, BIT Campus, Tiruchirappalli.

3) Represented Anna University Tiruchirappalli for First science conclave of Nobel Laureates held at IIIT, Allahabad in December 2008.

4) Organized (Co-coordinator) one day workshop on "Mobile and Wireless Sensor Networks" on 8th February, 2009 at Center for Convergence of Technologies (CCT), Anna University Tiruchirappalli, Tiruchirappalli, Tamil Nadu, India

5) Organizing secretary for a two day workshop on Pervasive computing technologies at Anna University, Tiruchirappalli 21-22 Feb 2011.

6) Joint-organizing Secretary for HEAT work shop organized by Department of Physics, Anna University of Technology in 2011.

7) Organizing Committee member of "Mini Colloquium on Nanofabrication Technologies" organized by Division of Nanoscience and Technology, Anna Univeristy, BIT Campus, Tiruchirappalli on 25-26 March 2013.

5. Other contribution (if any)

Invited Lectures:

1) TEQIP II Sponsored Expert Talks on Paradigms of Computing, Modeling and simulation at Anna University, BIT Campus, Tiruchirappalli

2) Invited lecture on "Embedded Computing – Essentials" at Kings College of Engineering, Punalkulam, Thanjavore.

3) Invited talk on "Sensor Networks- a New Sense of Communication" NSROM-2013 Conducted by Dept of IT & CSE, Bharathiar University, Coimbatore, Tamil Nadu.

4) Invited Expert Lecture on Network Simulators conducted by Dept of CSE, SASTRA, Kumbakonam.

5) Invited Lecture on Pervasive computing – Sensor Networks Perspective for AICTE sponsored workshop on pervasive computing technologies at Kings College, Thanjavur on 26 the April 2013.

6) Judge and chief guest for National Conference on "Recent Trends in Computer Science" at Shri Angalamman College of Engineering and Technology on 19th Feb 2010 Trichy, Tamil Nadu, India

7) Judge for a National level Conference on "" at St.Joseph College of Engineering on 26th Feb 2010, Thanjavore, Tamil Nadu

8) Expert Lecture in wireless/satellite communication for AICTE sponsored Staff Development Programme on Wireless Communication, Srinivasa Polytechnic College on 18th Dec 2009 Trichy, Tamil Nadu, and India.

9) Session Judge for a National conference on A Mobile/wireless network at Pavendar Bharathidasan college of engineering and Technology on 3rd April 2009.

Signature

HOD   **Dean**