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Dr. Christeena Joseph is working as an Associate Professor in the Department of Electronics and Communication Engineering, SRM Institute of Science and Technology, Ramapuram, Chennai, Tamil Nadu, India. She completed her B.E degree in ECE in the year 1997 from Mohamed Sathak Engineering College, Ramanathapuram, and her Postgraduate in VLSI Design in 2007 from Govt. College of Technology Coimbatore. She completed her Ph.D. Degree at Saveetha Institute of Medical and Technical Sciences, Chennai in the area of Wireless Adhoc Networks. Her teaching and research interests include Wireless Networks, Internet of Things, and Network Security. She has around 17 years of teaching experience from various reputed engineering colleges.

Areas of Research: Wireless Adhoc and Sensor Networks, Network Security, IoT

## FUNDED PROJECT - worked as Co-Principal Investigator

Title- Investigation of Real-Time Intrusion Detection Systems in Wireless Ad hoc Networks (Ref no ERIPR/ER/1203037/M/01/1433) Funding Agency-DRDO Grant Received-10.55 Lakhs Status-Completed (2012-2015)

## PUBLISHED ARTICLES

1. D. Girish Kumar;Christeena Joseph;M. Venkata Subbarao, Pansharpening of Multispectral Images using Deep Learning Architectures: Trends & Future Directions 2<sup>nd</sup> international conference on Applied Artificial Intelligence and Computing May 4-6 2023

2. M. Reji, C. Joseph, K. Thaiyalnayaki and R. Lathamanju, "Genetic-based fuzzy IDS for feature set reduction and wormhole attack detection," Computer Systems Science and Engineering, vol. 45, no.2, pp. 1265–1278, 2023

3.A. Akilandeswari, D. Sungeetha, Christeena Joseph, K. Thaiyalnayaki, K. Baskaran, R. Jothi Ramalingam, Hamad Al-Lohedan, Dhaifallah M. Al-dhayan, Muthusamy Karnan, Kibrom Meansbo Hadish, "Automatic Detection and Segmentation of Colorectal Cancer with Deep Residual

Convolutional Neural Network", *Evidence-Based Complementary and Alternative Medicine*, vol. 2022, Article ID 3415603, 8 pages, 2022. https://doi.org/10.1155/2022/3415603

4. M. Reji, M. Christeena Joseph. 'An Intrusion Detection System Based on Hybrid Machine Learning Classifier'.Journal of Intelligent and Fuzzy Systems 44 (2023) 4245–4255 DOI:10.3233/JIFS-222427

5. Christeena Joseph, R. Kishore, B. Janani, B. S. Nihal; Intelligent crop prediction for farmland using real-time sensor data and machine learning. *AIP Conference Proceedings* 5 April 2022; 2405 (1): 030005. https://doi.org/10.1063/5.0072728

6. Balasundaram, S., Balasundaram, R., Rasuthevar, G., Joseph Christeena, Vimala, A. G., Rajendiran, N., & Kaliyamurthy, B. (2021). Automated Detection and Classification of Breast Cancer Nuclei with Deep Convolutional Neural Network. *Journal of ICT Research and Applications*, *15*(2), 139-151. https://doi.org/10.5614/itbj.ict.res.appl.2021.15.2.3

7. K. Thaiyalnayaki, Christeena Joseph, Classification of plant disease using SVM and deep learning, Materials Today: Proceedings, Volume 47, Part 1,2021, Pages 468-470, ISSN 2214-7853,https://doi.org/10.1016/j.matpr.2021.05.029.

8. Kishoreraja, P.C., Baskar, R., Joseph, C., Reji, M. (2021). Identifying Sensor Node Behavior Using Temporal Correlation for Data Modifier Attack. In: Komanapalli, V.L.N., Sivakumaran, N., Hampannavar, S. (eds) Advances in Automation, Signal Processing, Instrumentation, and Control. i-CASIC 2020. Lecture Notes in Electrical Engineering, vol 700. Springer, Singapore. https://doi.org/10.1007/978-981-15-8221-9\_40

9.Christeena Joseph, PC Kishoreraja, Radhika Baskar, M Reji,Performance evaluation of MANETS under black hole attack for different network scenarios, Indian Journal of Science and Technology 8 (29), 1-1018

10.Christeena Joseph, P.C.Kishoreraja, M.Reji, Radhika Baskar,Design of Wireless Sensor Network Gateway for the Internet of Things, International Journal of Pure and Applied Mathematics 117 (9), 41-45

11.C. Joseph, P. Swaroop, and Y. S. Reddy, "Prevention of packet dropping in wireless Ad Hoc networks using HLA algorithm," 2017 International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS), Coimbatore, India, 2017, pp. 1-4, doi: 10.1109/ICIIECS.2017.8275898.

12.P.C.Kishore Raja, Christeena Joseph, M Reji, Radhika Baskar, Real-Time Experimental Analysis of Mobile Ad-Hoc Traffic in Indoor and Outdoor Environment, International Journal of Engineering and Technology (IJET) 7 (3), 922-928

13.Reji Mano, PCK Raja, Christeena Joseph, R Baskar, Hardware Implementation of Intrusion Detection System for Ad-Hoc Network, International Journal of Reconfigurable and Embedded Systems (IJRES) 5 (3)

14.P.C.Kishoreraja, D.Dhanasekaran, Christeena Joseph,Efficient Approaches to improve the performance metrics of Wireless Intrusion Detection System, International Journal of Computer Applications,0975-8887,3,57,pp-19-27

15.M Reji, PC Raja, Christeena Joseph, Radhika Baskar A genetic-Fuzzy Approach for Detection of Worm Attack in Ad-Hoc Wireless Networks, Indian Journal of Public Health Research & Development 8 (4), 1312-1321

16.Radhika Baskar, Dr.P.C.Kishoreraja, Christeena Joseph, Node Attribute Behavior-Based Intrusion Detection in Sensor Networks, International Journal of Engineering and Technology (IJET) 5 (5), 3692 -3698

17.S.Lakshmi, Christeena Joseph, Clustering Based Voting Mechanism To Detect The Malicious Nodes in MANET, International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.33, pp 26823-26829

18.Karthik R, Christeena Joseph, Detection of Blackhole Attack in an Adhoc Network Using IDS, International Journal of Scientific Research and Engineering Studies(IJSRES), Volume 2Issue 5, ISSN:2349-8862

19.M Reji, PCK Raja, Christeena Joseph, R Baskar Performance metrics of wormhole detection using path tracing algorithm, Indian Journal of Science and Technology 8 (17), 1-9

20.R Baskar, PCK Raja, ChristeenaJoseph, M Reji, Sinkhole attack in wireless sensor networks—performance analysis and detection methods Indian Journal of Science and Technology 10 (12)

21.Radhika Baskar, PC Kishore Raja, M Reji, Christeena Joseph, Performance analysis of scalability in the sinkhole compromised topology of wireless sensor networks, International Journal of Pure and Applied Mathematics 117 (9), 35-39

22.JMA Shajahan, Christeena Joseph, G Keerthipriya, PCK Raja Target detecting defence humanoid sniper IEEE Third International Conference on Computing Communication & Networking Technologies (ICCCNT), July 2012 Pages 1 – 6, Accession Number:13252240

2 3.Viswanadh Gupta Tallam, Christeena Joseph Counterflow robot for Restaurant, International Journal of Innovative Technology and Exploring Engineering, 2019, 8(12), pp. 1371-1373

2 4.Christeena Joseph Sk .Nayab Rasool, Gesture Signals Processing, International Journal of Innovative Technology and Exploring Engineering (IJITEE),2019, 8(12), pp. 1406-1409

25.Srujana Uddanti, Christeena Joseph IoT Based Energy Metering And Theft Detection, International Journal of Pure and Applied Mathematics 117 (19), 47-51

26.B Harshavardhan, Christeena Joseph, Review On Real-Time Traffic Estimation With Connected Vehicles, International Journal of Pure and Applied Mathematics 119 (17), 1553-1557

27.MB Kumar, Christeena Joseph Remote Monitoring of garbage Bins Using Internet of things, Indian Journal of Public Health Research & Development 8 (4), 1098-1101

28.Christeena Joseph, A.D.Ayyappan GPS/GSM Based Bus Tracking System, , International Journal of Scientific & Engineering Research, Volume 4, Issue 12, 176 ISSN 2229-5518 pp 176-179

29.Siva Reddy, D., Christeena Joseph, A traffic sign detection tracking and recognition system for video frames using KNN algorithms, International Journal of Innovative Technology and Exploring Engineering, 2019, 8(11 Special Issue), pp. 56-61

30.S Gayathri, Christeena Joseph, Creating New Museum Experiences for Visible Light Communication, Indian Journal of Public Health Research & Development 8 (4), 1095-1097

31.N Sreekanth, Christeena Joseph CDMA using Digital Watermarking Based on Orthogonal Pseudorandom Sequences, Indian Journal of Public Health Research & Development 8 (4), 1102-1105

32. PV Sai, Christeena Joseph, Image Encryption and Decryption Using Radial Basis Function and Multilayer Perceptron, International Journal of Pure and Applied Mathematics 119 (17), 1559-1562

33. Bhaskara, M., Christeena Joseph, Performance evaluation of best-path selection using multi-hop decode and forward cooperative system, International Journal of Innovative Technology and Exploring Engineering, 2019, 8(11 Special Issue), pp. 81-84

34. Christeena Joseph, P.C.Kishoreraja, Energy And Power Data Transmission Through Domestic Power Lines, International Journal of Scientific and Engineering Research. August 2014, Volume-5 Issue -8, 43-47

35.Uddanti, S., Christeena Joseph, Survey on various IoT platforms, International Journal of Pharmacy and Technology, 2016, 8(4), 20181-20196

## National Patents Published:

- 1. Intelligent Emotional Quotient Processing using Brain Signals and ZYNC SOC, Date of Publication:21-01-2022(202141062067)
- 2. Smart Non-Invasive Blood Glucose Monitoring Device for Diabetics Patient, Date of Publication:12-08-2022(202241044319)
- 3. Multi-OS Mobile Phone (2015) (Ref no 5175/CHE/2013)
- 4. Android-based measurement of tooth pressure (2015) (Ref no 5174/CHE/2013)
- 5. Animal Tracking Strap using RFID and IOT(Granted) 28-03-2023 (382438-001)
- 6. IOT Based Sensory Cyber physical System for Climate Change Monitoring 30-06-2023(202341037776)

## **Professional Body Membership:**

International Association of Engineers