

Dr. R. Isaac Sajan,

Vice Principal & Professor,
Electronics & Communication Engineering,
Ponjesly College of Engineering, Nagercoil-3.
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JOURNAL PUBLICATIONS

SCI & Scopus: 10
Journals : 21

CONFERENCE PUBLICATIONS

International: 08
National: 08

PATENT

Filled: 01
Published: 01

BOOKS
PUBLISHED
Books: 4

PhD. RESEARCH GUIDANCE

Pursuing: 09
Completed: 01

RESOURCE
PERSON
03

CONFERENCE
CHAIR
02

JOURNAL
REVIEWER
06

Faculty Identification

- AICTE Faculty ID: 1422467628
- Anna University Faculty ID: 9618020
- ORCID ID: 0000-0003-3414-5147
- Scopus Author ID: 57214329243
- Web of Science Researcher ID: AAM-7705-2021
- Vidwan ID: 290470

Area of Expertise

- Cloud Computing
- Artificial Intelligence
- Wireless Sensor Networks
- Mobile Computing

1. V. Bibin Christopher, **R. Isaac Sajan**, T.S. Akhila, and M. Joselin Kavitha, Prediction of weather using high-performance gradient boosting, *International Journal of Global Warming* 2023 31:1, 30-41. **(SCI & Scopus)Q3.**
2. **R. Isaac Sajan**, V. Bibin Christopher, Drinking Water quality detection using Genetic Neural network, *International Journal of Global Warming* 2023. Published Online **(SCI & Scopus)Q3.**
3. **Isaac Sajan R.**, V. Bibin Christopher; A Fuzzy Inference System for enhanced groundwater quality assessment and index determination. *Water Quality Research Journal* 1 August 2023; 58 (3): 230–246. <https://doi.org/10.2166/wqrj.2023.03>. **(SCI & Scopus)Q2.**
4. Kokila, M.L.S., Christopher, V.B., **Sajan, R.I.** et al. Efficient abnormality detection using patch-based 3D convolution with recurrent model. *Machine Vision and Applications* 34, 54 (2023). <https://doi.org/10.1007/s00138-023-01397-z> **(SCI & Scopus)Q2.**
5. Christopher, V.B., **Sajan, R.I.**, Akhila, T.S. et al. (2022), A QoS Aware Three Way Point Rule based Fusion of Earth Worm and Deer Hunt Optimization Routing in Wireless Sensor Network. *Wireless Pers Commun* (2022). <https://doi.org/10.1007/s11277-022-09995-2> **(SCI & Scopus)Q3.**
6. Soni Mera G V, Joselin Kavitha M, **Isaac Sajan R**, (2022), An Comparative Study of Machine Learning Models for Stock Market Rate Prediction, *International Journal of Scientific Research in Engineering and Management (IJSREM)* Volume: 06 Issue: 08 | August – 2022, ISSN:12582-3930.
7. Vineesh Muthu Raja S, **Isaac Sajan R**, Sworna Kokila M L, (2022), An Efficient Evaluation of Trusted Nodes in Wireless Sensor Networks, *International Journal of Scientific Research in Engineering and Management (IJSREM)* Volume: 06 Issue: 08 | August – 2022, ISSN:12582-3930.
8. **Sajan, R.I.**, (2022), Christopher, V.B., Kavitha, M.J. et al. An energy aware secure three-level weighted trust evaluation and grey wolf optimization based routing in wireless ad hoc sensor network. *Wireless Networks*. <https://doi.org/10.1007/s11276-022-02917-x>. **(SCI & Scopus)Q2**
9. **Isaac Sajan R**, (2022), S Vinesh, Muthu Raja, Bibin Christopher, E Fenil, AN ENHANCED CLUSTER HEAD SELECTION BASED ROUTING SCHEME FOR WIRELESS SENSOR NETWORKS ,*International Journal of Scientific Research in Engineering and Management (IJSREM)*, Volume 1, Issue 6, Page 1-6.
10. **R Isaac Sajan & J, Jasper**. (2021). A Secure Routing Scheme To Mitigate Attack In Wireless Adhoc Sensor Network. *Computers & Security*. 103. 102197. <https://doi.org/10.1016/j.cose.2021.102197>. **(SCI & Scopus)Q1.**

11. **Dr. Isaac Sajan R**, Sugan J "Enhanced Energy Efficient Routing in Wireless Sensor Network Using Modified Trust Based Leach Protocol " (2021) , International Journal of Scientific Research in Science, Engineering and Technology Online ISSN : 2394-4099 | Print ISSN : 2395-1990 UGC Journal No : 47147, Vol 8, Issue 09, Page 08-17.
12. **Isaac Sajan, R. & Jasper, J..** (2020). Trust-based secure routing and the prevention of vampire attack in wireless ad hoc sensor network. International Journal of Communication Systems. 33. 10.1002/dac.4341. <https://doi.org/10.1002/dac.4341>. **(SCI & Scopus)Q2**.
13. **Isaac Sajan R & Jasper J**, (2020) , An Efficient Approach to Detect DoS Attacks in Wireless Ad hoc Sensor Network International Journal of Scientific Research and Engineering Development, Volume 3, Issue 6, pp-270-274.
14. **Isaac Sajan R & Sugan J** (2019), An Enhanced Cluster (CH-LEACH) Based Routing Scheme For Wireless Sensor Network, International Research Journal of Engineering and Technology, vol. 06, Issue 2, PP 1456-1459.
15. **Isaac Sajan R & Sugan J** (2019), An Efficient Cluster (H-LEACH) Based Routing Scheme For Wireless Sensor Networks, International Research Journal of Engineering and Technology, vol. 02, Issue 03, PP 48-52 .
16. **R.Isaac Sajan**, V.Bibin Christopher, Dr.J.Jasper (2017), A Comprehensive Survey on Efficient Energy Consumption in Wireless Sensor Networks, International Journal of Control Theory & Applications, Vol.10, Issue 11, PP 151-157.**(Scopus)**
17. **Isaac Sajan R**, (2017), An Adaptive Mobility Based Attack Detection Mechanism to Detect Selective Forwarding Attack in Wireless Sensor Network, International Journal of Recent Research In Mathematics Computer Science and Information Technology. Volume 4. Issue 1.
18. **Isaac Sajan R**, (2017) Energy Efficient Optimal Paths using PDORP-LC, International Journal of Recent Research In Mathematics Computer Science and Information Technology, Volume 04, Issue 01, Pages30-36.
19. **Isaac Sajan R**, Adarsh Kumar, Bibin Christopher, AJ Deepa (2017) Evaluation of Trusted Nodes in WSN Networks Using PDORP-LC, International Journal of Recent Research in Mathematics Computer Science and Information Technology, Volume 03, Issue 02, Pages 98-104.
20. **Isaac Sajan R**, Bibin Christopher V, S.K.Shaju,(2017), An Effective Mechanism to Detect Selective Forwarding Attack in Wireless Sensor Network, International Journal of Recent Research in Mathematics Computer Science and Information Technology, Volume 03, Issue 02, Pages 60-66.

21. **Isaac Sajan R**, Dr.J.Jasper, Dr.E.Arun,(2015) Surveying the Effect of Vampire Attack in Wireless Ad-hoc Sensor Networks, International Journal of Control Theory & Applications, Volume 08, Issue 05, Pages 2051-2061.(Scopus).

International Conference Publications

1. **Dr. Isaac Sajan R**, (2021), Energy Efficient Routing in Wireless Adhoc Sensor Network Using Trust Based Modified Leach Protocol, Proceedings on International Conference on Artificial Intelligence and Computing Technologies in Agriculture and Rural Development (ICAICTAR-'21).
2. **Dr. Isaac Sajan R**, Sugan J, M Joselin Kavitha, V Bibin Christopher, J Jasper (2021) "Enhanced Energy Efficient Routing in Wireless Sensor Network Using Modified Trust Based Leach Protocol "2nd International Conference on Emerging Trends in Materials, Computing and Communication Technologies ", held at Annai Velankanni College of Engineering on 09.12.21 & 10.12.2021.
3. **Isaac Sajan.R**, Surveying the Effect of Vampire Attacks in Wireless Adhoc Sensor Networks", Springer International Conference on Soft Computing Systems-2016, 19th February 2016, Noorul Islam University, Kumaracoil, Tamil Nadu, India.
4. **Isaac Sajan.R**, Rejo.R.G, Optimization of a light weight system based on wireless sensor networks for automatic supervision of patients within nursing institutes, First International Conference on Research vogues in information and communication Technologies, Pages 1-5, February 2014, DMI college of Engineering Aralvoimozhi, Tamil Nadu, India.
5. **Isaac Sajan.R**, User Centered Privacy Control for mobile content sharing application, International Conference on trends in Engineering, ICMACE'14, 19th and 20th February 2014, Tamizhan College of Engineering and Technology , Chenbagaramanputhoor, Tamil Nadu, India.
6. **Isaac Sajan.R**, Shibu Ram.V.J Collusion Detection and Multiparty Access Control for Online Social networks, International Conference on trends in Engineering ,ICMACE'14, CS-489, 19th and 20th February 2014, Tamizhan College of Engineering and Technology , Chenbagaramanputhoor, Tamil Nadu, India.
7. **Isaac Sajan.R**, Febin.R, Secure Data and images using various RDH Schemes, International Conference EMICS'13 , IP30,15th and 16th February 2013, Maria College of Engineering and Technology, Attoor, Tamil Nadu, India.

8. **Isaac Sajan.R**, Saravanan.D, Mala.N Protocol to Verify Delivered Qos in Multi Hop Wireless Network, International Conference on Data Ware Housing, Data Mining and Networking,ICDN'07, 123-130, 4 to 6th OCT 2007,Jayaram College of Engineering and Technology, Trichy, Tamil Nadu, India.

National Conference Publications

1. **Isaac Sajan.R**, Manju.C.Thayammal,Bibin Christopher.V, Image Enhancement for Overlapped FingerPrints, National Conference on Advanced Engineering and Technology, NCAET13, 105-108, 9th March2013 ,Ponjesly College of Engineering, Nagercoil, Tamil Nadu, India.
2. **Isaac Sajan.R**, Febin.R, Securing Enhanced Data and Images using Various RDH Schemes, National Conference on Advanced Engineering and Technology, NCAET13, 105-108, 9th March2013 ,Ponjesly College of Engineering, Nagercoil, Tamil Nadu, India.
3. **Isaac Sajan.R**, Bibin Christopher.V, A Network Code Based Privacy Preserving Scheme Against Traffic Analysis in Multihop Wireless Networks, National Conference on Technological Trends in Electrical Engineering, 117-121, 21st September 2012,Ponjesly College of Engineering, Nagercoil, Tamil Nadu, India.
4. **Isaac Sajan.R**, Bibin Christopher.V, Manju.C.Thayammal, Advanced Peer to Peer Botnet Architecture, National Conference on Emerging Trends and Applications in Computer Science,NETACS2011, 731-734, 25th FEB 2011, Ponjesly College of Engineering, Nagercoil, Tamil Nadu, India.
5. **Isaac Sajan.R**, Senthil Nathan.R, An Enhanced Key Management with Location-Based Services for Secure Group Communication, IV National Conference on Advanced Computing Sponsored in part by The Council of Scientific and Industrial Research,44-47, March 6 2010, CSI College of Engineering, Ketti, Tamil Nadu, India.
6. **Isaac sajan.R**, Image fusion based on Contourlet using Weighted energy Region, National Conference on Emerging Trends in Computing Technologies(NCECT2011),23rd March 2011, Joe Suresh Engineering College, Tirunelveli, Tamil Nadu, India.
7. **Isaac Sajan.R**, A Hybrid Peer to Peer Botnet Architecture, National Conference on Advances in Computing and IT, NCACIT'11, 24th Feb 2011, Nehru Arts and Science College, Coimbatore, Tamil Nadu, India.

8. **Isaac Sajan.R**, Cell Breathing using numerical Analysis and LevelSet Algorithms for Load Balancing in Wireless Networks, National level Technical Conference on “ Convergence and Hybrid Information Technologies”, 3rd April 2010, IFET College of Engineering, Villupuram, Tamil Nadu, India.

Professional Membership

- **Life Member (320099)** – International Association of Engineers (IAENG) Member.
- **Life Member (LM 61779)** – Indian society for Technical Education (ISTE).

Professional Certification

- Introduction to serverless computing on AWS - **AWS educate**
- Introduction to cyber security – **CISCO**
- An Introduction to Artificial Intelligence – **NPTEL**
- Assessment of Practical and Social Skills in Higher Education – **NPTEL**
- Mobility Fundamentals Series: Wireless Technology and Standards – **CISCO**
- Introduction to Packet Tracer – **CISCO**
- Introduction to the Internet of Things – **CISCO**
- Analysing Data in Amazon S3 using Amazon Athena – **AWS Educate**
- Entrepreneurship – **CISCO**
- STEP – **Hindu News Paper**
- Machine Learning Onramp – **Math Work**
- AWS Inventor – **AWS Bandage**
- Cloud Computing 101 – **AWS Bandage**
- Software Defined Software Concept – **Vmware Bandage**
- Virtualization Concepts - **Vmware Bandage**
- Introduction to Cyber Security – **CISCO Bandage**
- Customize org to support new business unit – **Sales Force Bandage**
- Data Security – **Sales Force Bandage**

- Reports & Dashboard for lightening experience – **Sales Force Bandage**
- AWS Cloud practitioner – **Sales Force Bandage**
- Trailhead Basics – **Sales Force Bandage**
- Low code love20 – **Sales Force Bandage**

Seminars/Webinars/Workshops Attended

- Databases on AWS, Future of RPA, VMware cloud, Accelerating Experiential Learning, The future of making things, Introduction to AI & ML, Cybersecurity Essentials, Design thinking, Digital Transformation in Enterprise – ICTACT, 2020.
- Leading in a VUCA WORLD, The Corona Effect – The BC to AD, Unlocking Business – ICTACT, 2020.
- Employability skills, Power of Industry Academia Engagement – ICTACT, 2020.
- The Future of Education, Employment & Entrepreneurship – ICTACT, 2020.
- Industrial Automation - Sathyabama Institutions , 2020.
- IOT – Crystal clear Technology and Innovation, Coimbatore, 2020.
- The Power of You – ICTACT, 2020.
- Virtual Reality – Pantech & SRM, 2020.
- Alexa – AWS, 2020.
- Image Recognition APP – AWS, 2020.
- IOT – PSNA, 2020.
- Job Skills to Succeed in a Post Pandemic World – ICTACT, 2020.
- You can do it – ICTACT, 2020.
- The Future of Skills - Education, Employment & Entrepreneurship – ICTACT, 2020.
- Good Teacher to Great Teacher – ICTACT, 2020.
- Employability for Future – ICTACT, 2020.
- Personal Financial Management – ICTACT, 2020.
- “Future Tech 2020” – ICTACT, 2020.

Faculty Development Programmes Attended

- **Innovation Methods in VLSI Design Using AI and ML** from 24.08.23 to 30.08.23.MLRIT,Hydrabad.
- **Outcome Based Education**, 6 Days FDP organised by IQAC KIOT, 2020.

- **Sales force business administration specialist**, 7 Days FDP organised by Salesforce & ICTACT, 2020.
- **Modern house Design in Revit Architecture**, 7 Days FDP organised by ICTACT, 2020.
- **NAAC Awareness Program for Faculty**, 7 Days FDP organised by MMIT, 2020.
- **BOSS LINUX**, 2 Day FDP organised by VIT, 2020
- **Disruptive Technologies**, 3 Days FDP organised by Sathyabama, 2020.
- **Data Science with Python**, 6 Days organised by ICTACT, 2020.

Resource Person

- Resource person for training graduate teachers organised by RMSA, Kanyakumari District on 11.01.2018 and 18.01.2018
- Resource person for ICT training for graduate teacher organised by RMSA kanyakumari District and jointly by thuckalay education district on 04.01.2018 and 05.01.2018.
- Resource person at Bharathidasan University college Perambalur on 3rd February 2012 on topic Mobile Computing.

Ph.D Guidance (Research Coordinator)

Sl.No.	Register No.	Name of the Scholar	Reg. Year	University	Status
1.	1524589110	Ms.Devina Merin	2015 -2023	Anna University	Viva Completed
2.	1612389106	Mr.Suresh K	2016	Anna University	Thesis Submitted
3.	1514389719	Mr.Srinivasan P	2015	Anna University	Thesis Submitted

Ph.D Guidance (Supervisor)

Sl.No.	Register No.	Name of the Scholar	Reg. Year	University	Status
1.	23144891240	Mr.Sugan J	Jan 2023	Anna University	Course Work
2.	23244891309	Ms.Soni Meera G V	Jan 2023	Anna University	Course Work
3.	23244897433	Ms.Manchu M	Jul 2023	Anna University	Course Work
4.	23244897435	Ms.Felsy C	Jul 2023	Anna University	Course Work
5.	23149897456	Mr.Arullraj N K	Jul 2023	Anna University	Course Work
6.	23244897451	Ms.Jelba J	Jul 2023	Anna University	Course Work
7.		Mrs.Maria Somini	Jan 2024	Anna University	
8.		Mrs.Shajini	Jan 2024	Anna University	