Name: Dr. Suresh Sankaranarayanan

Position Professor

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Department Computer Science

Office Number CS-2093

Qualifications Phd in Networking, University of south Australia, Australia (2006)

Post-Doctoral Research University of Sydney – 2007; University of Technology Sydney-2006

Professional Association SMIEEE – Senior Member IEEE, Computer Society (Since 2010)

Research Area Internet of Things, Edge/Fog Computing, Machine Learning, Wireless Networking, Intelligent Agents

Google Scholar https://scholar.google.com/citations?user=dnJOQ88AAAAJ&hl=en

Scopus: https://www.scopus.com/authid/detail.uri?authorId=35079304100

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I. Research Publications (Last Five years-)

A. Journals (Peer Reviewed)

A.1 Science Citation Indexed (Clarivate Analytics)

1. Shaw, P, Pachpor, K and Suresh, S, "Explainable AI enabled infant mortality prediction based on neonatal sepsis," *Computer Systems Science and Engineering*, vol. 44, no.1, pp. 311–325, 2023. **[Q3; Impact Factor 4.397]**

2. Srividhya, S., Sankaranarayanan, S., Kozlov, S. A., J., J. (2022). Fuzzy Aggregator Based Energy Aware RPL Routing for IoT Enabled Forest Environment. *CMC-Computers, Materials & Continua, 72(2)*, 4039–4055. **[Q2; Impact Factor-3.860]**

3. Gouthaman, P and Suresh, S, "Prediction of Risk percentage in software Projects by training Machine Learning Classifiers, International Journal of Computers and Electrical Engineering, Vol.94, pp. 1-9, Elsevier, 2021. **[Q1; Impact Factor- 4.152]**

4. Srividhya, S, Suresh, S, Kozlov, S A and Joel J P C Rodrigues, "Compression Aware Aggregation and Energy Aware Routing in IoT-Fog Enabled Forest Environment", Sensors Journal, Vol.21 (13), pp.1-18. MDPI, 2021 **[Q1; Impact Factor-3.847]**

5. Suresh,S, Malavika Prabhakar, Sreesta Satish, Prerna Jain, Anjali Ramprasad, Aiswarya Krishnan, "Flood Prediction Based on Weather Parameters Using Deep Learning", IWA Journal on Water and Climate Change, Vol.11(4), pp. 1766-1783, 2020. **[Impact Factor-1.900, SNIP-0.737] [Q2; Impact Factor-2.803]**

6. Lakshmi Kanthan, N and Suresh,S, "IoT Based Water Demand Forecasting and Distribution Design for Smart City", IWA Journal of Water and Climate change, Vol.11 (4), pp. 1411–1428, 2020 **[Q2;Impact Factor –2.803]**

7. Lakshmi Kanthan, N, Suresh,S, Joel J P C Rodrigues, Segei Kozlov, "Water Demand Forecasting Using Deep Learning for Water Distribution System Design in IoT Enabled Water Distribution Network, International Journal of Computer Communications and Control, Vol.15(6), 1-15, 2020.**[Q2; Impact Factor- 2.635]**

8. Veeramanikandan, M, Suresh, S, J P C Rodrigues, Vijayan Sugumaran, Sergei Kozlov, "Data Flow and Distributed Deep Neural Network Based Low Latency IoT-Edge Com putation Model for Big Data Environment", Engineering Applications of Artificial Intelli gence, Vol. 94, Elsevier, 2020 **[Q1; Impact Factor-7.802]**

9. R J Tom , Suresh,S, J P C Rodrigues, "Agent Negotiation in an IoT-Fog based Power Distribution System for Demand Reduction", Sustainable Energy Technologies and Assessment, Vol.38, 2020 **[Q1; Impact Factor-7.632]**

10. R J Tom, Suresh,S, V H C Albuquerque, J P C Rodriguez, "Aggregator based RPL for IoT-Fog based power distribution System with 6LowPAN, "China Communications Journal(Co-Sponsored by IEEE Communication Society), Vol.17(1),pp.104-117, 2020 **[Q1; Impact Factor- 2.688]**

11. R J Tom, Suresh, J P C Rodriguez, "Smart Energy Management and Demand Reduction by Consumers and Utilities in an IoT-Fog based Power Distribution System", IEEE Journal on Internet of Things, Vol.6 (5), pp.7386-7394, 2019 **[Q1; Impact Factor- 9.471]**

12. Veeramanikandan,M and Suresh,S, "Publish/Subscribe based Multi-Tier Edge Computational Model in Internet of Things for Latency Reduction", Journal of parallel and Distributed Computing, Vol.127, pp. 18-27, 2019 Elsevier **[Q1; Impact Factor- 4.542]**

13. Manav, M, Sameer,S, Suresh,S, Tom, R J and Veeramanikandan,M, "IoT Based Hydroponics System using Deep Neural Networks", Journal of Computers and Electronics in Agriculture, Vol.155,pp.473-486, 2018, Elsevier Publishing **[Q1; Impact Factor-6.757]**

A.2 WoS Indexed (Clarivate Analytics)

14. Ravichandran, A., Mahulikar, K., Agarwal, S., & Sankaranarayanan, S. Post Thoracic Surgery Life Expectancy Prediction Using Machine Learning. International Journal of Healthcare Information Systems and Informatics (IJHISI), 16(4), 1-20, 2021. **[Q3; SNIP-0.487]**

15. 16. Abdul Qadir Zakir; Anushka Singhal; Gurkirat Singh; Pracheesh Pandey; Suresh Sankaranarayanan. Soil Utilisation Prediction for Farmers Using Machine Learning. International Journal of Sustainable Agricultural Management and Informatics, Vol.7 (1), pp.67-75, 2021[**Q2; SNIP-0.541**]

16. Lakshmi Kanthan, N, Suresh, S, J P C Rodrigues, Pascal Lorenz, "Multi Agent Modeling for Underground Pipe Health and Water Quality Monitoring For Supplying Quality Water", International Journal of Intelligent Information Technologies, Vol.16(3), pp. 52-79, IGI Global, 2020 [**Q4; SNIP-0.88**].

17. 18. Arpit Tripathi, Simran Kaur, Suresh,S, Lakshmi Kanthan,N and R J Tom, "Water Demand Prediction For Housing Apartments Using Time Series Analysis", International Journal of Intelligent Information Technologies, Vol.15(4), pp.57-75,IGI Global, 2019 [**Q4; SNIP-0.88**]

18. Suresh,S and Srijanee, M, "SVM Based Traffic Data Classification for Secured IoT Based Road Signaling system", International Journal of Intelligent Information Technologies, Vol.15(1),pp. 22-50, IGI Global, 2019[Q4; SNIP-0.88]

A.3 Scopus Indexed Journals

19. Shubra Jain, Ankit Kumar Parida, Suresh,S, "Water Scarcity Prediction for Global Region Using Machine Learning", Journal of Water, Vol. 14(1), pp. 69-88, Inderscience,

2021. **[Q4; SNIP-0.489]**

B. Book Chapters (Scopus Indexed)

1. Pervez, N., Agarwal, A., Sankaranarayanan, S. (2023). Application of Deep Learning for COVID Twitter Sentimental Analysis Towards Mental Depression. In: Choudrie, J., Mahalle, P., Perumal, T., Joshi, A. (eds) IOT with Smart Systems. Smart Innovation, Systems and Technologies, vol 312. Springer, Singapore. https://doi.org/10.1007/978-981-19-3575-6_14 [SNIP- 0.398]

2. Srividhya, S., Sankaranarayanan, S. (2022). IoT Enabled Energy Efficient Routing in Forest Fire. In: Kumar, A., Mozar, S. (eds) ICCCE 2021. Lecture Notes in Electrical Engineering, vol 828. Springer, Singapore. https://doi.org/10.1007/978-981-16-7985-8_4[SNIP-0.204]

3. Ravichandran A., Suresh S. (2021) Anomaly Detection in Videos Using Deep Learning Techniques. In: Choudhary A., Agrawal A.P., Logeswaran R., Unhelkar B. (eds) Applications of Artificial Intelligence and Machine Learning. Lecture Notes in Electrical Engineering, vol 778, pp,263-275, 2021. Springer, Singapore. [SNIP-0.204]

4. Suresh S., Omalur S., Gupta S., Mishra T., Tiwari S.S. Traffic Management System Based on Density Prediction Using Maching Learning. In: Kaiser M.S., Xie J., Rathore V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2020). Lecture Notes in Networks and Systems, vol 190, pp. 269-276, 2021. Springer, Singapore.[SNIP – 0.797]

5. Mandal M., Zakir A.Q., Suresh S. Weather Prediction Based on Seasonal Parameters Using Machine Learning. In: Kaiser M.S., Xie J., Rathore V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2020). Lecture Notes in Networks and Systems, vol 190, pp. 195-202, 2021. Springer, Singapore. [SNIP-0.797]

6. Narayanan L.K., Suresh S. Multi-Agent Based Water Distribution and Underground Pipe Health Monitoring System Using IoT. In: Latifi S. (eds) 16th International Conference on Information Technology-New Generations (ITNG 2019). Advances in Intelligent Systems and Computing, vol 800, pp.395-400, Springer, Cham

7. Mookherji S., Suresh,S. Traffic Data Classification for Security in IoT-Based Road Signaling System. Soft Computing in Data Analytics. Advances in Intelligent Systems and Computing, vol 758, pp.589-599, Springer, Singapore, 2018

8. Tom R.J., and Suresh, S, Performance Evaluation of RPL Routing Protocol for IoT Based Power Distribution Network. Smart and Innovative Trends in Next Generation Computing Technologies. Communications in Computer and Information Science, vol 828, pp.212-226, Springer, Singapore, 2018.

C. Conference Proceedings (IEEE Xplore)

1. Akshat, K, Pranjal, P, Suresh, S, Lorenz, P, "COVID Pneumonia Prediction Based on Chest X-ray Images using Deep Learning", Proceedings of IEEE International Conference on Communications, Seoul, Korea, May 16-20, 2022, pp.4150-4155.[H5-index- 10.05, Rank- 23]

2. Ramkumar, S, Vasudevan, C K, Sarnaam, M K, Sahaana, K and Suresh,S, "Deep Convolution Network Analysis For Crop Growth Prediction", Proceedings of IEEE International Conference for Convergence in Technology, Pune, India, 07-09, April 2022, pp.1-5.

3. Srividhya,S and Suresh,S, "IoT-Fog Enabled Framework for Forest Fire Management", Fourth world Conference on Smart Trends in Systems, Security and Sustainability, London, UK, 2020, pp.273-276.

4. Lakshmi Kanthan, N and Suresh,S, "IoT Enabled Smart Water Distribution and Underground Pipe Health Monitoring Architecture for Smart Cities " Proceedings of 5th IEEE International conference for Convergence in Technology, Pune, India, 2019 ,pp.1-7.

5. Geogen, G and Suresh,S, "Lightweight Cryptographic Solutions for Fog based Blockchain", Proceedings of International Conference on Smart Structures and Systems (ICSSS), Chennai, India, 2019, pp. 1-5

6. Rijo Jackson Tom and Suresh,S, "Multi Agent System Architecture for an IoT-FOG based Power Distribution Management System", Proceedings of IEEE International Conference on Artificial Intelligence, Smart Grid and Smart City Applications, Coimbatore, Tamilnadu, India,2019,pp.630-633

7. Gouthaman,P and Suresh,S, "Agile Software Risk Management Architecture for IoT-Fog based System", Proceedings of IEEE International conference on Smart Systems and Inventive Technology, Tamilnadu, India, 2018, pp. 48-51

II.   Patents Granted (Indian Patent)
- **380185**: IoT Based Agricultural Monitoring System and Method Thereof
- **388847**: An IoT Fog Based Power Distribution for Smart Energy Management and A Method Thereof

III.   Collaborative Projects
- Intelligent Price Forecasting System for Optimal Energy Market- Collaborative work between SRM Institute of Science and Technology and University of Malaya, Malaysia - Funded by SATU Presidents' Forum International Secretariat, Taiwan
- Fuzzy Aggregator Based Energy Aware RPL Routing for IoT Enabled Forest Environment- Collaborative work between Federal University of Piauí (UFPI), Teresina - PI, Brazil, Instituto de Telecomunicações, Portugal, & ITMO University, St. Petersburg, Russia- Funded by FCT/MCTES through national funds and, co-funded EU funds under the Project UIDB/50008/2020; Ministry of Science and Higher Education of the Russian Federation, Grant 08-08; and by the Brazilian National Council for Scientific and Technological Development-CNPq, via Grant No. 313036/2020-9.
- Compression Aware Aggregation and Energy Aware Routing in IoT-Fog Enabled Forest Environment- Collaborative work between Federal University of Piauí (UFPI), Teresina - PI, Brazil, Instituto de Telecomunicações, Portugal, & ITMO University, St. Petersburg, Russia- Funded by FCT/MCTES through national funds and co-funded EU funds under the Project UIDB/50008/2020; Ministry of Science and Higher Education of the Russian Federation Grant 08-08 and by Brazilian National Council for Scientific and Technological Development - CNPq, via Grant No.313036/2020-9
- Water Demand Forecasting Using Deep Learning for Water Distribution System Design in IoT Enabled Water Distribution Network- Collaborative work between Federal University of Piauí (UFPI), Teresina - PI, Brazil, Instituto de Telecomunicações, Portugal, & ITMO University, St. Petersburg, Russia- Funded by by FCT/MCTES through national funds and co-funded EU funds under the Project UIDB/50008/2020; and by Brazilian National Council for Scientific and Technological Development - CNPq, via Grant No. 309335/2017-5.
- Data Flow and Distributed Deep Neural Network based low latency IoT- Edge Computation model for big data environment- Collaborative work between Federal University of Piauí (UFPI), Teresina - PI, Brazil, Instituto de Telecomunicações, Portugal, Oakland University, USA & ITMO University, St. Petersburg, Russia- Funded by FCT/MCTES through national funds and co- funded EU funds under the Project UIDB/EEA/50008/2020; Government of the Russian Federation; and by the Brazilian National Council for Research and Development- (CNPq) via Grant No. 431726⁄2018−3 and 309335⁄2017−5
- Multi Agent Modeling for Underground Pipe Health and Water quality Monitoring for Supplying Quality Water- Collaborative work between Federal University of Piauí (UFPI), Teresina - PI, Brazil, Instituto de Telecomunicações, Portugal & University of Haute Alsace, France- Funded by FCT/MCTES through national funds and co-funded

EU funds under the Project UIDB/EEA/50008/2020; and by the Brazilian National Council for Research and Development (CNPq) via Grant No. 309335/2017-5

- Agent Negotiation in IoT-Fog based Power Distribution system for Demand Reduction-Collaborative work with Federal University of Piauí (UFPI), Teresina - PI, Brazil & Instituto de Telecomunicações, Portugal, - Funded by FCT/MCTES through national funds and co-funded EU funds under the Project UIDB/EEA/50008/2020; and by the Brazilian National Council for Research and Development (CNPq) via Grant No. 431726/2018-3 and 309335/2017-5

- Smart Energy Management and Demand Reduction by Consumers and Utilities in IoT-Fog Based Power Distribution Systems- Collaborative work with National Institute of Telecommunications (Instituto Nacional de Telecomunicações—Inatel),Brazil supported in part by National Funding from the FCT—Fundação para a Ciência e a Tecnologia through the UID/EEA/500008/2019 Project, in part by Finep, with resourcesfrom Funttel, Grant no. 01.14.0231.00, under the Radiocommunication Reference Center (Centro de Referência em Radiocomunicações (CRR)) project of the National Institute of Telecommunications (Instituto Nacional de Telecomunicações— Inatel), Brazil, and in part by the Brazilian National Council for Research and Development (CNPq) via Grant No. 309335/2017-5

- Aggregator Based RPL For an IoT-Fog Based Power Distribution System with 6Lowpan- Collaborative work with Federal University of Piauí (UFPI), Teresina - PI, Brazil & Instituto de Telecomunicações, Portugal, - National Funding from the FCT-Fundação Para a Ciência e a Tecnologia through the UID/ EEA/50008/2019 Project by Brazilian National Council for Scientific and Technological Development (CNPq) via Grant No. 309335/2017-5.

IV. Thesis and Research Projects Supervised

A. Phd Thesis
1. Srividhya, S**, Energy Efficient Routing in 6LowPAN Network for IoT- Fog Enabled Forest Fire Environment"**, Phd Computer Science and Engineering, SRM Institute of Science and Technology, Chennai, India, 2022
2. Gouthaman, P**, Software Based Risk Management in IoT using Machine Learning Techniques",** Phd Computer Science and Engineering, SRM Institute of Science and Technology, Chennai, India, 2022
3. Lakshmi Kanthan, N , I**oT-Fog based Water Distribution Management and Under Ground Pipeline Health Monitoring Using Intelligent Agents**", Phd Computer Science and Engineering, SRM Institute of Science and Technology, Chennai, India, 2020
4. Rijo Jackson Tom**, Intelligent Agent based Smart energy Management For Demand Reduction in IoT-Fog Based Power Distribution System",** Phd Computer Science and Engineering, SRM Institute of Science and Technology, Chennai, India, 2019
5. Veeramanikandan, M**, Artificial Intelligence Based Latency Reduction Techniques in Fog/Edge Computing in IoT and Big Data Environments**", Phd Computer Science and Engineering, SRM Institute of Science and Technology, Chennai, India, 2019

B. Master's Thesis and Research Projects
1. Srijanee Mookerji, **"Intelligent Security Analytics of IoT based Traffic Signalling System"**, M.Tech Information Security and Cyber Forensics, Department of Information Technology, SRM University, Chennai, India , 2018.
2. Shijo Mathew, **"Security in Smart Energy Meter System",** M.Tech Information Security and Cyber Forensics, Department of Information Technology, SRM University, Chennai, India, 2017.

3. Giridhar, R **"Secured Data Dissemination in Wireless Sensor Networks",** M.Tech Information Security and Cyber Forensics, Department of Information Technology, SRM University, Chennai, India, 2016

4. Vigneshwaran, U, **"Secured Hospital Management System"**, M.Tech Information Security and Cyber Forensics, Department of Information Technology, SRM University, Chennai, India, 2016

5. DevaDewan, V, **"Intelligent Forest Fire Detection using Wireless Sensor Network"**, M.Tech Information Techlognology, Department of Information Technology, SRM University, Chennai, India, 2016.

6. Paul Hamilton, "**Mobile Based RFID On Demand bus Scheduling and Ticketing System**", **M.Sc** Computer Science, Department of Computing, University of WestIndies, Jamaica ,2014

7. Dennis Humes**, "Management of Road Traffic Violations using Cellular Mobile devices", M.Sc** Computer Science, Department of Computing, University of WestIndies, Jamaica, 2014

8. Ricardo Adams, **"Smart Agent based Search for Admissions in Institutions of Higher Learning", M.Sc** Computer Science, Department of Computing, University of WestIndies, Jamaica ,2014

9. Duarte-Rhian Nicely, **"A Personal Information System using Cellular Mobile devices in the Android Environment", M.Sc** Computer Science, Department of Computing, University of WestIndies, Jamaica 2014

10. Philip Smith, "**Smart Agent based Mobile shopping and Payment in Android Environment", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2013.

11. Leighton Cox, **"Intelligent Agent based University Search & Admission System", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012

12. Craig Dixon, **"Application of Agents in Mobile Real Estate Search System" M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica , 2012

13. Wayne Lawrence, **"Application of Agents in Hotel Search and Secured Booking System"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012

14. Dwayne Parchment, **"Agent Application in Scheduling of Student- Staff Appointment System"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012

15. Floyd Garvey, **"Secure Agent based Mobile Airline Search and Booking System"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012

16. Jodie Smith, **"Applications of Agents in hospital Related Issues"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012

17. Donovan Gentles, **"Applications of Biometrics for Mobile Voting", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2012.

18. Norvin Dixon, **"Smart Agent based Mobile Tutoring and Querying System"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2011.

19. Salathiel Bogle**, "Intelligent Agent based Mobile Job Search & Secure Application", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2011

20. Arthur Hylton, **"Intelligent Agent based Scheduling for Patient Appointment", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2011

21. Kurt Cuffe, **"Intelligent Agent based Negotiation and Scheduling for Student**

Appointment", **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2011.

22. Meleek Harley, **"Intelligent Agent based Mobile Healthcare"**, **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2011.

23. Kevin Miller, **" Applications of Policy based Agents in Wireless Body sensor Mesh Networks for Health Sector" M.Phil**, Department of Computing, University of West Indies, Jamaica, 2010

24. Courtney McTavish, **"Intelligent Agent based Hotel Search and Booking System", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010

25. Loraine Smith-Bailey,**" Intelligent Agent based Mobile Tour Planner, M.Sc** .Computer Science, Department of computing, University of West Indies, Jamaica, 2010

26. Michael Gordon, **"Biometric Security Mechanism in Mobile Payment"**, **M.Sc** .Computer Science, Department of computing, University of West Indies, Jamaica, 2010

27. Patrick Brown, **"Automated Web based Computer purchase & Repair**", **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010

28. Norman Benjamin, **"Performance of Wireless Sensor based Mesh Network for Health Application", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010

29. Dawnette Stephenson, "**Software Based Automated Referencing Systems**" **M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010.

30. Duklon Stennett, **"Applications of Personal Mobile Information System", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010

31. Tyrone Edwards, **"Intelligent Agent based Hospital search and Appointment System", M.Sc** Computer Science, Department of Computing, University of West Indies, Jamaica, 2010.

32. Nadine Maitland , **""**, **M.Sc** Computer Science**,** Department of Computing, University of West Indies, Jamaica, 2010

33. David Barnes, "**Performance Testing for the comparison of Client/Server versus Agent based routing in wireless Body Sensor Networks for health Applications"**, *M.S, computer Science, Department of Electrical and computer Engineering, Oakland University, Rochester, Michigan, USA, 2009*.

34. Ryan Brown, **"Intelligent Agent Based Mobile Shopper", M.Sc**. computer Science **,** Department of computing, University of West Indies, Jamaica, 2009

35. Lavare Henry, "**Intelligent agent based Mobile Tutoring System", M.Sc** Computer Science, Department of Computing, University of WestIndies, Jamaica, 2009

36. R.R. Santhosh, **"Fuzzy Based RED for Poisson Traffic"**, **M.E**., Department of Electronic Sciences, Sathyabama University, Chennai, India, 2006.

37. M. Selvakumar, **"Fuzzy Based RED for CBR Traffic", M.E**., Department of Electronic Sciences, Sathyabama University, Chennai, India, 2006

C.   Bachelor (Hons) Research Projects

1. Vighnesh Anand and Aarohi Patni, **"Deep Learning Based Predictive Maintenance For Oil Spill Detection"**, Department of Networking and Communications, SRM Institute of Science and Technology, Chennai, 2022

2. Vidhisha, T and Tania, G, **"Smart Agriculture Using IoT"**, Department of Networking and Communications, SRM Institute of Science and Technology, Chennai, 2022

3. Priti shaw and Kaustubh Pachpor, **"Explainable AI for Machine Learning**

Enabled Viral Mortality Prediction Based on Infant Immunity", Department of Information Technology, SRM University, Chennai, 2021

4. Naseela Parvez and Aditya Agarwal, **"Twitter Sentimental Analysis of COVID Towards Mental Depression Using Deep Learning"**, Department of Information Technology, SRM University, Chennai, 2021
5. Rohit Sanyal and Karan Singh, **"Sentimental Analysis on Covid-19 Tweets"**, Department of Information Technology, SRM University, Chennai, 2021
6. Ramkumar, Vasudevan, Sarnaam Mustafa, Sahaana Karthikeyan, **"Crop Growth Monitoring using Deep Learning"**, Department of Information Technology, SRM University, Chennai, 2020
7. Sumeet Omalur, Sarthak Gupta, Swasti Sumedha Tiwari, Tanya Mishra, **"Vehicle Density Prediction using Data analytics for Advanced Traffic Management System"**, Department of Information Technology, SRM University, Chennai, 2020
8. Akshaya Ravichnadran, Shreya Agarwal, Krutika Mahulikar,**"Post Thoracic Surgery Life Expectancy Prediction Using Machine Learning"**, Department of Information Technology, SRM University, Chennai, 2020
9. Anushka Singal, Abdul Qadir Zakir, Gurkirat Singh, Pracheesh Pandey, **"Soil Uilisation Prediction Using Machine Learning"**, Department of Information Technology, SRM University, Chennai, 2020
10. Ankit Kumar Parida, Shubra Jain, Gorav Garg, Rishi Raj, **"Machine Learning Enabled Water Scarcity Prediction"**, Department of Information Technology, SRM University, Chennai, 2020
11. Sreesta Satish, Prerna Jain, Anjali Ramprasad, Aiswarya Krishnan and Malavika Prabhakar, **"Early Flood Warning System Using Deep Learning "**Department of Information Technology, SRM University, Chennai, 2019
12. Priyanshu Dugaya, Shriya Mishra, Sejal Shrivastava, Amrit Raj Sharma and Vaibhav, **"Pathological Data Analysis For Fever Diagnosis Using Machine Learning"**, Department of Information Technology, SRM University, Chennai, 2019
13. Mahalakshmi Bhagyaraj, Dhruv Jain and Anshila Raina, "**Heart Disease Prediction Using Machine Learning"**, Department of Information Technology, SRM University, Chennai, 2019
14. Nishtha Goswami, Faraaz Hasan Khan, Arihant Bardiya and Ankit Prasad, **"Blockchain Security in IoT Based System in Distributed Cloud"**, Department of Information Technology, SRM University, Chennai, 2019
15. Manav Mehra and Sameer Saxena , "**IoT Based Hydroponics system using Deep Neural Networks "**, Department of Information Technology, SRM University, Chennai, 2018
16. Arpit Tripathi and Simran Kaur, **"Intelligent IoT Based Water Management System for Housing Apartments"**, Department of Information Technology, SRM University, Chennai, 2018
17. Yuthika Shekhar, Sourabh Mishra, Ekta Dugar, **"Intelligent IoT based Agriculture Monitoring System"**, Department of Information Technology, SRM University, Chennai, 2017
18. Bhavya Jain, Varun Kamat, Sakshi Srivastava, **"Crop Monitoring and Analysis using Unmanned Aerial Vehicle"**, Department of Information Technology, SRM University, Chennai, 2017
19. Soundarya Pappu, Prathyusha Vudatha, Niharika, **"Intelligent IoT based Water Quality Monitoring System"**, Department of Information Technology, SRM University, Chennai, 2017.
20. Parth Dwivedi and Vishwas Choudhary, **"IoT based Smart Garbage System"**, Department of Information Technology, SRM University, Chennai, 2017.
21. Vignesh Mani, Abhilasha Kashyap, Guna, **"IoT based Smart Energy Management System"**, Department of Information Technology, SRM University, Chennai, 2017.

22. Ashok, V, **"IoT Based Traffic Signalling System"** Department of Information Technology, SRM University, Chennai, 2017.
23. Norafiqah Haji Mohd Ali, **"Intelligent Mobile Prepaid Wireless Energy Meter"**, Computing and Information Systems, School of Computing and Informatics, Institut Teknologi Brunei, Brunei Darussalam, 2015
24. Mohammad Yazid Awg Yusof, **"Intelligent IoT based Inventory Control in Pharmacy"**, Computing and Information Systems, School of Computing and Informatics, Institut Teknologi Brunei, Brunei Darussalam, 2015
25. Mona Melissa Chin, **"Intelligent IoT Enabled Hospital Medicine Collection"**, Computing and Information Systems, School of Computing and Informatics, Institut Teknologi Brunei, Brunei Darussalam, 2014 2015
26. Fatimah Haji Awang Mohammad, "**Intelligent IoT based Patient Hospital Appointment**", Computing and Information Systems, School of Computing and Informatics, Institut Teknologi Brunei, Brunei Darussalam, 2015
27. Nurul Ummi Binti Ramli, **"Home Based Wireless Heart Monitoring System"**, Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei, 2014.
28. Swabik Musa Abdalla Wani, **"NFC Enabled Cloud based Intelligent Hospital appointment Scheduling and Medicine Collection"**, Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei, 2014
29. Siti Nur'afifah binti Sait, **"NFC Enabled Mobile Patient Appointment Systems"**, Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei , 2013 **[Best Honors Research Project in 2013]**
30. Haja Nh Siti Aminah binti Haji Maidin, **"RFID Enabled Inventory Tracking System for IT Assets Management"**, Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei, 2013
31. Sarina Hamid, "**Mobile Cloud Electronic Health Record**:", Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei , 2013
32. Aida Harayani Pusa, " **Sensor based Smart Home monitoring**", Department of Computing and Information Systems, Institut Teknologi Brunei, Brunei, 2013

V. Professional Activities
A.   Journals (Reviewer)
1. Journal of Computer Networks and Applications, Elsevier
2. Computing, Materials and Conitnua, TechScience Press
3. Computer Systems Science and Engineering , Tech Science Press
4. Electronics, MDPI Publishers
5. International Journal of Sustainable Agricultural Management and Informatics, Inderscience
6. Information and software Technology, Elsevier
7. Adhoc Networks, Elsevier
8. Concurrency and Computation: Practice and Experience, Wiley
9. Computer Networks, Elsevier
10. International Journal of Computer Communication and Control
11. Expert Systems with Applications, Elsevier
12. International Journal of Disaster Risk Reduction, Elsevier
13. Engineering Applications of Artificial Intelligence, Elsevier
14. Transactions on Emerging Telecommunication Technologies, John Wiley & Sons
15. IEEE Sensors
16. Engineering Applications of Artificial Intelligence, Elsevier
17. International Journal of Electrical Power and Energy Systems, Elsevier
18. IEEE Internet of Things Journal
19. Journal of Clean Energy and Production, Elsevier
20. Sustainable energy Technologies and Assessment, Elsevier
21. International Journal of Intelligent Information Technologies, IGI Publishing

22. IEEE Consumer Electronics Magazine
23. Biometric Authentication in Online Learning Environments, IGI Publishing
24. Mobile Information Systems, Hindawi Publisher
25. IEEE Access
26. Elsevier Journal of Informatics in Medicine Unlocked
27. International Journal of Computer Information System and Industrial Management Applications
28. International Journal of Machine Learning and Computing
29. International Journal of Medical Informatics, Elsevier Publisher
30. Recent Patents on Telecommunications, Bentham Science Publishers
31. International Journal of E-Health and Medical communications, IGI Publisher
32. International Journal of Information Sciences and Techniques, AIRCC Publisher
33. IEEE Transactions on Parallel and Distributed Systems
34. International Journal of E-Services and Mobile Applications, IGI Publisher.
35. International Journal of computational Science and engineering, Inderscience publisher
36. International Journal of Handheld computing Research (IJHCR), IGI publisher
37. International Journal of Computer Science and Applications (IJCSA), TMRF, Publisher

B. Conferences (Reviewer)

1. 30th IEEE International Conference on Software, Telecommunications and Computer Networks, Hvar, Croatia, 2022
2. 29th IEEE International Conference on Software, Telecommunications and Computer Networks, Hvar, Croatia, 2021.
3. International Conference on Decision Aid Science and Applications, Bahrain, 2020
4. IEEE International Conference on Wireless Communication, Signal Processing and Networking, Chennai, India, 2016
5. National Conference on Big Data and IoT, SRM University, Chennai, India, 2016
6. International Conference on Network and Computer Science (ICNCS 2014), Manila, Philippines, 2014
7. IEEE International Conference on Clean Energy and Technology, Langkawi, Malaysia, 2013
8. Second IFIP/IEEE Asian Himalayas International conference on Internet (AH-ICI), Kathmandu, Nepal, 2011.
9. International Conference on Business, Engineering and Industrial Applications, Kulalampur, Malaysia, 2011
10. IEEE Symposium on Computers and Informatics (ISCI 2011), Malaysia
11. IEEE International Conference on Electro/ Information Technology (EIT 2010), Illinois, Chicago, USA
12. 4th IEEE International conference on Computer Science and Convergence Information Technology (ICCIT 09), Seoul, Korea
13. 2nd IEEE International conference on Interaction Sciences: Information Technology, Culture and Human (ICIS 09), Seoul, Korea
14. 2009 IEEE International conference on New Trends in Information and Service Science (NISS 2009)
15. First International conference on Caribbean Conference on Information Communication Technology (CCICT 09), Kingston, Jamaica
16. Sixth IEEE International conference on Wireless and Optical communication Networks (WOCN 09), Cairo, Egypt
17. 2008 IEEE International Conference on Electro/ Information Technology (EIT 2008), Iowa, USA
18. 4th International conference on Information Technology (ITNG 2007) - IEEE Computer Society
19. 3rd IEEE International Conference on Computer Networks and Mobile Computing (ICCNMC 05), 2005

C. Editor/Associate Editor for journals

Special Issue **"Intelligent Data Analytics for Interdisciplinary domains"**, International Journal of Intelligent Information Technologies, 2019 **[Web of Science and Scopus Indexed]**

VI. Thesis Examiner (Phd and Master's)

1. Stacked Ensemble Deep Learning of Water Quality Index Prediction in Imbalanced Data, University of Malaya, Malaysia, 2022

2. A Lightweight One-Stage Object Detection Model for Machine Vision Based Recognition System, University of Malaya, Malaysia, 2022.

3. Use of Social Information in Relay Selection Schemes to improve the Throughput of Device-to-Device Communications, Thammasat University, Thailand, 2020.

4. Investigating Multimedia Data for Secure Digital Communication, Anna University, Chennai, India, 2020

5. A Quantitative Analysis of Chaos Communications in Broadband Wireless Networks, Phd Thesis, Department of Electronics and Communication Engineering, SRM University, Chennai, India

6. Development of Channel Based routing Mobile Adhoc Network, Phd Thesis, computer Science & Engineering, Annamalai University, Tamilnadu, India

7. A study of Mobile Phone Ad Hoc Networks via Bluetooth with different Routing Protocols, M.sc Computer Science Dissertation, University of Cape Town, South Africa, 2013.

8. Study of QoS Multicast Routing for Mobile AdHoc Networks, Ph.D Thesis, Satyabhama University, Chennai, India, 2010

9.An Agent based Layer Framework to facilitate Intelligent wireless Sensor Networks, M.Sc computer Science, University of Cape town, south Africa, 2010

VII. Invited Talks

1.Faculty Development Programme on Data Science Computation and Intelligence entitled "Applications of Artificial Intelligence in IoT Based systems" by AICTE Training and Learning Academy, 21st October 2020

2.Internet of Things and its applications, 2017, Department of Computer Science and Engineering, KCG College of Technology, Chennai, India

3.Internet of Things, 2016, IT Student Association, Department of Information technology, SRM Institute of science and Technology, Chennai, India

4. Cyber Risks and the Board Room, "Cyber Security Forum 2015- Combating Cyber Security Threats", 4th February 2015, Brunei Darussalam

5. Agent based Mobile Ubiquitous Computing Tutorial, 2nd IEEE International Conference on Information and Communication Technology, 29th May 2014, Bandung, Indonesia

6. Intelligence in Mobile Ubiquitous Systems", 30th May 2014, Telekom University, Bandung, Indonesia

7. Research Methodology Workshop for Master's and PhD scholars., 6th April 2013, Institut Teknologi Brunei, Brunei

8. Application of Intelligent Agents in Mobile Computing, 18th Feb 2011, University of Technology, Jamaica.

9. Seminar/Training on Opnet, 4th & 5th Feb 2010, Rajalakshmi Engineering College, Anna University, Chennai, India

10. Intelligent Agents and their Industrial Applications, 2nd Feb 2010, Centre for Development of Advanced computing (CDAC)- Ministry of Information Technology, Government of India

11. Workshop/Training programme on Opnet/ns2, 1st Feb 2010, MNM Jain Engineering College, Anna University, Chennai, India

12.Seminar/Training programme on "Theoretical and practical Aspects of Networking, 25th January 2010, Velammal Engineering College - IETE sponsored, Anna University, Chennai, India

13. Intelligent Agents and their Applications in Commerce and Industry", IEEE International conference on Advances in Computing, Control and Telecommunication Technolo

gies, Trivandrum, India, 28-29, December 2009

14. Intelligent Agents with commercial and Industrial Applications", 1st IEEE International Conference in Advanced Computing, Chennai, India, 13-15, Dec 2009

15. Network Simulation: ns-2 & Opnet" , 7th January 2008 towards Anna University Faculty Development Programme in RMK Engineering College, Chennai, India

16. Network Simulation" on 28th November 2007 towards Anna University Faculty Development Programme in Eswari Engineering College, Chennai, India

17. Workshop on "Network simulation" 9 -11 July 2007, Sathyabama University, Chennai, India

VIII.   Workshop and Seminar Conducted

1. Seminar on "AI for Health Analytics", 31st March 2021 by CSIR-CEERI R&D lab, Govt ofIndia

2. Seminar on "IoT and its deplotment ", 30th March 2021 by Cognizant technology Solutions, Chennai, India

3. Seminar on "Is Edge Saviour of IoT", 26th March 2021 by Altran Technologies, Chennai,India

4. Seminar of "Machine Learning with Strategic Decision", 19th March 2021, RadianceTechnology Services, Chennai, India

5. Seminar on Recent Trends in Deep Learning Research, October 3rd 2020, SamsungR&D, Bangalore.

6. Workshop on Deep Learning with hands on Training using Python, September 3rd & 4th2020, Aegis School of Data Science, Bangalore

7. Seminar on Big Data Analytics , August 17th and 19th 2020 by RMS Insurance, USA andAegis school of Data Science, Bangalore, India.

IX.   Prizes and Awards

1. Certification of Appreciation for highest number of Scopus Citation for academic year 2021-22, SRM Institute of Science and Technology, Chennai, India, 2022

2. Certificate of Appreciation for Industrial Collaborated Network Lab with NETSIM from Tetcos Industry for academic year 2021-22, SRM Institute of Science and Technology, Chennai, India, 2022.

3. Certificate of Appreciation towards Patent Granted for academic year 2021-22, School of Computing, SRM Institute of Science and Technology, Chennai, India, 2022.

4. Placement Award for 100% placement of Computer Networking Specialization students for academic year 2018-2022 on 29th April 2022, SRM Institute of Science and Technology, Chennai, India

5. Felicitated and honored for two Patent Granted on World Intellectual Property Day, 26th April 2022, SRM Institute of Science and Technology, Chennai, India.

6. Research and Publication Award, SRM Institute of Science and Technology, Kattankulathur Campus, Chennai, India, 2016-17.

7. Travel Award from Science and Engineering Research Board- Department of Science and Technology, Govt of India for 12th Iberian Conference on Information Systems and Technologies, Lisbon, Portugal, 2017

8. Research and Publication Award, SRM Institute of Science and Technology, Kattankulathur Campus, Chennai, India, 2015-16.

9. Excellence Award for Research Output, Dept. of Computing, University of West Indies, 2011

10.IEEE Travel grant for the 11th Asia Pacific Conference on Communications (APCC 2005) , Perth (Australia), 2005

11. UNISA President Scholarship (UPS) for the entire Ph.D. Programme (2002-2005)