

BIO DATA



Name : **Dr. S.Vimal, M.E., Ph.D**
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1. Educational Qualification

Degree	Branch / Specialization	Institute/University	Year of Passing
B.Tech	Information Technology	Jayaram College of Engg & Tech, Trichy / Anna University Chennai	May 2005
M.E	Computer & Communication	Mahendra Engg.College,Salem / Anna University of Technology-coimbatore	June 2011
M.B.A	Systems	Alagappa University under Distance Mode	Sep 2008
Ph.D	Information and Communication Engineering	Anna University Chennai (Registered on July 2015)	August 2019

2. Professional/ Industry Experience

: (in chronological order)

S.No	Designation	Institution/Organization	Period	
			From	To
1	Assistant Professor (Senior Grade)	Ramco Institute of Technology	25.02.2021	Till date
2	Assistant Professor (Senior Grade)	National Engineering college, Kovilpatti	01.08.2016	24.02.2021
3	Assistant Professor	National Engineering college,Kovilpatti	06.06.2011	30.07.2016
4	Lecturer	SCAD College of Engg & Tech,Tirunelveli	15.12.2008	21.09.2009

Updated as on 01.03.2020

5	Lecturer	M.P.N.M.J.Engg college, Erode	30.06.2005	31.11.2008
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3. Research Area: Artificial Intelligence, Bigdata Analytics, Wireless Communications

4 Publications

4.1 JOURNAL PUBLICATIONS :

1. M. Poongodi, Mounir Hamdi, Mohit Malviya, Ashutosh Sharma, Gaurav Dhiman, **S. Vimal**, **Diagnosis and combating COVID-19 using wearable Oura smart ring with deep learning methods**, Personal and Ubiquitous Computing Springer, May 2021, SCIE ,**IF 2.000**, <https://doi.org/10.1007/s00779-021-01541-4>
2. A.Alfred Raja Melvin, G.Jaspher W Kathrine, S.Sudhakar Ilango, **S.Vimal**, Seungmin Rho, Neal N Xiong, Yunyoung Nam, “Dynamic Malware Attack Dataset Leveraging Virtual Machine Monitor (VMM) audit data for the detection of Intrusions in Cloud”, International Transactions on Emerging Telecommunications Technologies, Accepted, Wiley, SCI indexed, May 2021, (ISSN:2161-3915).
3. T.Ananth Kumar, R.Rajmohan, E.Golden Julie, Y.Harold Robinson, **Vimal Shanmuganathan**, Seifedine Kadry, “Reinforced Resource Management in Vehicular Fog Computing (VFC) using Deep Beacon Power Control (DBPC) protocol”, International Journal of Web and Grid Services, Accepted, Inderscience, SCI indexed, Pages:1741-1114, 2021, (**IF 2.75**).
4. R.Dinesh Kumar, E.Golden Julie, Y.Harold Robinson, **S.Vimal**, Sanghyun Seo, “Recognition of Food type and Calorie Estimation Using Neural Network”, The Journal of Supercomputing, Accepted, Springer, SCI INDEXED, Pages:1573-0484, April 2021, (**IF 2.469 (2019)**).
5. R.Satheesh Kumar, A.Francis Saviour, M.Rajeswari, E.Golden Julie, Y.Harold Robinson, **Vimal Shanmuganathan**, “Exploration of Sentiment Analysis and Legitimate Artistry for Opinion Mining”, Multimedia Tools and Applications, Accepted, Springer, SCI INDEXED, Pages:1573-7721, April 2021, (**IF 2.313**).
6. Janmenjoy Nayak, Pandit byomakesha dash, Bighnaraj naik, **S.Vimal**, “Deep Belief Network Based Probabilistic Generative Model for Detection of Robotic Manipulator Failure Execution”, Soft Computing, Accepted, Springer, SCI INDEXED, Pages:1433-7479, April 2021, (**IF 3.050**).
7. Subbulakshmi Pasupathi, **Vimal Shanmuganathan**, Kaliappan Madasamy, Harold Robinson Yesudhas, Mucbeol Kim, “Smart Accident Prediction Analysis using Agglomerative Hierarchical Clustering Approach for time series big data”, The Journal of Supercomputing, Accepted, Springer, SCI INDEXED, Page:1573-0484, April 2021, (**IF2.469 (2019)**).
8. L.Kalaivani, R.V.Maheswari, **S.Vimal**, Gengaraj, “PESBFOA: A novel approach for Performance Enhancement of SRM using AI Empowered Smart Bacterial Foraging Optimization Algorithm based Speed and Current PID Controllers for Industrial Applications”, Computer and Electrical Engineering, Elsevier, Accepted, SCIE INDEXED, April 2021, (ISSN: 0045-7906 **IF 2.663**).
9. **S.Vimal**, Y.Harold Robinson, M.Kaliappan, Ashish Kr. Luhach, NZ Jhanjhi, “AI based Forecasting of Influenza Patterns from Twitter Information using Random Forest algorithm”, Human-centric Computing and Information Sciences, Springer, Accepted, SCIE INDEXED, April 2021, (ISSN: 2192-1962 **IF 3.7**).

10. **S.Vimal**, Y.Harold Robinson, L.Kalaivani, Seifedine Kadry, A.Suresh, "EECCRN: Energy enhancement with CSS approach using Q-Learning and Coalition game modeling in CRN", Information Technology And Control, Kaunas University of Technology, Accepted, SCIE INDEXED, March 2021, (ISSN: 1392-124X **IF 0.905**).
11. Bighnaraj Nayak, Janmenjoy , Mishra Manohar, **S.Vimal**, Swapnarekha, Korhan Cengiz, "An Impact study of COVID-19 on Six Different Industries: Automobile, Energy & Power, Agriculture, Education, Travel & Tourism and Consumer Electronics", Expert Systems, Wiley, Accepted, SCIE INDEXED, March 2021, (ISSN:1468-0394 **IF 1.51**).
12. Chirantana Mallick, Asit Kumar Das, Janmenjoy Nayak, **S.Vimal**, Danilo Pelusi, "Evolutionary Algorithm based Ensemble Extractive Summarization for Developing Smart Medical System", Interdisciplinary Sciences: Computational Life Sciences, Springer, Accepted, SCIE INDEXED, March 2021, (ISSN:1913-2751 **IF 1.51**).
13. Seungmin Rho, S.Gopikumar, J.Rajesh Banu, Y.Harold Robinson, **Vimal Shanmuganathan**, Seifedine Kadry, "Novel Framework of GIS Based Automated Monitoring Process on Environmental Biodegradability and Risk Analysis using Internet of Things", Environmental Research, Elsevier, Accepted, SCIE INDEXED, Jan 2021, (ISSN:0013-9351 **IF: 5.715**).
14. **S.Vimal**, Y.Harold Robinson, Seifedine Kadry, Hoang Viet Long, "IoT based Smart health monitoring with CNN using edge computing", Journal of Internet Technology, Taiwan Academic Network, SCIE INDEXED, Page:161-173, Volume 22, No.1, Jan 2021, (ISSN 1607-9264 **IF: 1.3**).
15. Gaurav Dhiman, Diego Oliva, Amandeep Kaur, Krishna Kant Singh, **S. Vimal**, Ashutosh Sharma, Korhan Cengiz, "BEPO: A novel binary emperor penguin optimizer for automatic feature selection", Knowledge-Based Systems, Elsevier, SCI INDEXED, NOV 2020, (ISSN 0950-7051 **IF: 5.921**).
16. Lakshminarayanan, N.Muthukumaran, Y.Harold Robinson, **Vimal Shanmuganathan**, Seifedine Kadry, Yunyoung Nam K, "Deep Learning-based Hookworm Detection in Wireless Capsule Endoscopic Image using AdaBoost Classifier", Computers, Materials & Continua, Tech Science, SCI INDEXED, Nov 2020, (ISSN: 1546-2218 (print) **IF: 4.89**).
17. Yunyoung Nam, C.Sivamani, M.Rajeswari, E.Golden Julie, Y.Harold Robinson, **Vimal Shanmuganathan**, Seifedine Kadry, "Tyre Inspection through Multi-State Convolutional Neural Networks", Intelligent Automation & Soft Computing, Tech Science, SCI INDEXED, Oct 2020, (ISSN: 1079-8587 (print) **IF: 1.276**).
18. S.Gopikumar, S.Raja, Y.Harold Robinson, **Vimal Shanmuganathan**, Hangbae Chang, Seungmin Rho, "A method of landfill leach ate management using internet of things for sustainable smart city development, Sustainable Cities and Society", Sustainable Cities and Society, Elsevier, SCI INDEXED, Oct 2020, (ISSN 2210-6707 **IF: 5.268**).
19. Yunyoung Nam, G.Arun Sampaul Thomas, Y.Harold Robinson, E.Golden Julie, **Vimal Shanmuganathan**, Seungmin Rho, "Intelligent Prediction Approach for Diabetic Retinopathy Using Deep learning Based Convolutional Neural Networks Algorithm by Means of Retina Photographs", Computers, Materials & Continua, Tech Science, SCI INDEXED, Nov 2020, (ISSN:1546-2218 (print) **IF:4.89**).
20. V.Jackins, **S.Vimal**, M.Kaliappan, Mi Young Lee, "AI-based smart prediction of clinical disease using random forest classifier and Naive Bayes", The Journal of Supercomputing, Springer <https://doi.org/10.1007/s11227-020-03481-x>, SCI INDEXED, Page:1573-0484, Nov 2020, (IF 2.469 (2019)).
21. Y.Harold Robinson, **S.Vimal**, E.Golden Julie, Manju Khari, Christopher Expósito-Izquierdo, Javier Martínez, "Hybrid optimization routing management for autonomous underwater vehicle in the internet of underwater things", Earth Science Informatics, Springer, DOI: <https://doi.org/10.1007/s12145-020-00538-6>, SCI INDEXED, Oct 2020, (ISSN:1865-0481 **IF1.450**).

22. Madhumitha Ramamurthy, Y.HaroldRobinson, **S.Vimal**, A.Suresh, “Auto Encoder based Dimensionality reduction and classification using Convolutional Neural Networks for Hyper spectral Images”, Microprocessor and Microsystems, SCI Indexed, Nov 2020, (ISSN: 0141-9331 **IF1.1.61**).
23. **Vimal Shanmuganathan**, Y.Harold Robinson, Mohammad S Khan, Manju Khari, Amir H.Gandomi, “R-CNN and Wavelet Feature Extraction for Hand Gesture Recognition with EMG Signals”, Neural Computing & Applications (Springer Publications) SCI INDEXED, Oct 2020 (ISSN: 0941-0643 **IF4.7**).
24. Pradeepa S, Gayathri P, Nishmitha P, **Vimal Shanmuganathan**, Oh-YoungSong, Usman Tariq, Raheel Nawaz, “IoT based Health - Related Topic Recognition from Emerging Online Health Community – Med Help Using Machine Learning Technique”, Electronics-MDPI SCIE, September 2020 (ISSN 2079-9292 **IF2.41**).
25. B.Vijayalakshmi, K.Ramar, NZ Jhanjhi, Sahil Verma, M.Kaliappan, K.Vijayalakshmi, **S.Vimal**, Kavita, Uttam Ghosh, “An Attention Based Deep Learning Model For Traffic Flow Prediction Using Spatio Temporal Features Towards Sustainable Smart City”, [International Journal of Communication Systems](#), Wiley Publisher, SCIE, DOI:10.1002/dac.4609, August 2020 (ISSN:1099-1131 **IF1.319**).
26. **S.Vimal**, R.Aishwarya, M.Ajitha, R.Sarolin, “Glucose Prediction for Diabetic Patients Using Auto Regressive Model”, TEST Engineering and Management, Scopus, August 2020.
27. Golden Julie Eanoch, Israel Jeena Jacob, Paulraj Ebby Darney, Paulraj Betty, Hoang Viet Long, Robinson Yesudhas, **Vimal Shanmuganathan**, “Image Retrieval using Intensity Gradients and Texture Chromatic Pattern: Satellite Images Retrieval”, International Journal of Data Warehousing and Mining –IGI Global Publisher, SCIE, August 2020 (ISSN:1548-3924 **IF0.4**).
28. Madhumitha.R, IlangoKrishnamurthi, **S.Vimal**, Y.HaroldRobinson, “Deep learning based genome analysis and NGS-RNA LL identification with a novel hybrid model Bio systems”, Elsevier, SCI & SCIE, August 2020, (ISSN: 0303-2647 **IF1.808**).
29. Y.Harold Robinson, **S.Vimal**, Manju Khari, Fernando Carlos López Hernández, Rubén González Crespo, “Tree-based Convolutional Neural Networks for Object Classification in Segmented Satellite Images”, International Journal of High Performance Computing Applications, SCI & SCIE, June 2020, (ISSN:1094-3420 **IF2.365**).
30. M.Joemax Agu, S.Gopikumar, **S.Vimal**, Y.Harold Robinson, ”Failure Assessment of Pressure Vessels made of Plain Carbon Steel by Using Modified Inherent Flaw Model in DL based Industry optimization intelligent processing Measurement”, Elsevier SCI indexed, Volume:162, Issue:108112, December 2020, (ISSN: 0263-2241, **IF :3.364**).
31. M.Sivaram, M.Kaliappan, S.JeyaShobana, M.VijuPrakash, V.Porkodi, K.Vijayalakshmi **S.Vimal**, A.Suresh, “Secure storage allocation scheme using fuzzy based heuristic algorithm for cloud”, Journal of Ambient Intelligence and Humanized Computing, Springer SCI indexed, May 2020, (ISSN: 1868-5145 **IF:1.91**).
32. S.Pradeepa, K. R.Manjula, **S.Vimal**, MohammadS Khan, Naveen Chilamkurti, Ashish Kr. Luhach, “DRFS: Detecting Risk Factor of Stroke Disease from Social Media using Machine Learning Technique”, (Accepted for Publication), Neural Processing Letters (Springer) SCI indexed, May 2020, (ISSN: 1573-773X 2.591).**IF 2.7**
33. Madhumitha R, Ilango K, **S.Vimal**, A.Suresh, “Analysis of obstructive sleep apnea disorder with accuracy prediction using SVM for smart environment”, (Accepted for Publication), ACM Transactions on Multimedia Computing Communications and Applications (ACM Transactions),SCIE indexed <http://dx.doi.org/10.1145/3382782>, Volume :16, Issue:03, Feb 2020, (ISSN: 1551-6857 EISSN: 1551-6865 2.870). **IF 3.2**
34. **S.Vimal**, Manju Khari, Nilanjan Dey, Reuben Gonzalez Crespo, kaliappan, “Energy enhancement using multi objective ant colony optimization with double Q learning algorithm for IOT based cognitive radio networks”, Computer Communications, (Elsevier) SCI indexed, Volume 154, Pages 481-490, Mar 2020, (ISSN: 0140-3664 2.766). **IF 2.7**

35. **S.Vimal**, Manju Khari, Nilanjan Dey, Reuben Gonzalez Crespo, Harold Robinson, “Enhanced Resource allocation in mobile edge computing using reinforcement learning based MOACO algorithm for IIOT”, Computer Communications, (Elsevier) SCI indexed, Volume: 151, Page No:355–364, Jan 2020, (ISSN: 0140-3664 2.766). **IF 2.7**
36. **S.Vimal**, M.Kaliappan, A.Suresh, “CERVICAL CANCER IDENTIFICATION WITH SYNTHETIC MINORITY OVERSAMPLING TECHNIQUE AND PCA ANALYSIS USING RANDOM FOREST CLASSIFIER”, Journal of Medical Systems (Springer) SCI indexed <https://doi.org/10.1007/s10916-019-1402-6>, Vol:43, Issue:286, July 2019, (ISSN: 1573-689X 2.415). **IF 2.1**
37. **S.Vimal**, M.Kaliappan, A.Suresh, “Artificial Intelligence based attack mitigation Using Stochastic Game Theory Modeling with WQLA in Cognitive Radio Networks”, Journal of Web Engineering (Rinton Press) (Annexure-I) SCI indexed, Vol.17, No.6, Pg:3599-3618, Dec 2018, (ISSN:1540-9589 0.31).
38. **S.Vimal**, M.Kaliappan, “Development of cloud integrated IOT based intruder detection System”, Journal of Computational and Theoretical Nanoscience, Scopus Indexed Vol:15, Pages: 3570–3575, Nov 2018, (ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online)).
39. **S.Vimal**, L.Kalaivani, M.Kaliappan, A.Suresh, Xiao Zhi Gao, R.Varatharajan, “Development of secured data transmission using machine learning based discrete time partial observed Markova model and energy optimization in Cognitive radio networks”, Neural Computing & Applications (Springer Publications) (Annexure-I) SCI INDEXED DOI: 10.1007/s00521-018-3788-3, Oct 2018, (ISSN: 0941-0643 **IF 4.213**).
40. **S.Vimal**, L.Kalaivani, M.Kaliappan, “MITIGATION OF PUE ATTACK USING PSO IN WIRELESS COGNITIVE RADIO NETWORKS”, International Journal of Research in Engineering Technology, <http://www.engjournal.org/ICASCT03.html>, May 2018, (ISSN: 2455-1341).
41. **S.Vimal**, M.Kaliappan, A.Suresh, NattarKannan, Sivasubramanian, “PREDICTIVE BIG DATA ANALYTIC ON DEMONETIZATION DATA USING SUPPORT VECTOR MACHINE Cluster Computing”, The Journal of Networks, Software Tools and Applications (Springer Publications) (Annexure-I) SCI INDEXED DOI: <https://doi.org/10.1007/s10586-018-2384-8>, Feb 2018, (ISSN: 1386-7857(Print) 1573-7543 (Online) **IF 2.040**).
42. **S.Vimal**, M.Kaliappan, Sudhakar Ilango, P.Subbulakshmi, A.Suresh, “Optimization using Artificial Bee Colony based clustering approach for big data Cluster Computing”, The Journal of Networks, Software Tools and Applications, (Springer Publications) SCI INDEXED (Annexure-I) DOI: 10.1007/s10586-017-1571-3. Jan 2018, (ISSN: 1386-7857(Print) 1573-7543 (Online), **IF 2.040**).
43. **S.Vimal**, L.Kalaivani, M.Kaliappan, “Collaborative approach on mitigating Spectrum Sensing Data Hijack attack and Dynamic spectrum allocation based on CASG modeling in wireless cognitive radio networks Cluster Computing”, The Journal of Networks, Software Tools and Applications, (Springer Publications) SCI INDEXED (Annexure-I) DOI: 10.1007/s10586-017-1092-0, Aug 2017, (ISSN: 1386-7857(Print) 1573-7543 (Online), **IF 2.040**).
44. E.Marippan, M.Kaliappan, **S.Vimal**, “Energy Efficient Routing protocol using Grover’s Searching algorithm using MANET”, Asian Journal of Information Technology, Volume: 15, Issue: 24, Page no:4986-4994, Dec 2016, (ISSN:1682-3915).
45. P.Subbulakshmi, **S.Vimal**, “Secure data packet transmission in Manet using enhanced identity-Based cryptography (eibc)”, International Journal of New technologies in science and engineering, Volume:03, Issue:12, Page no:35-41, Dec 2016, (ISSN : 2349-0780).
46. Jerart julus.L, **Vimal.S**, Dhaya.R, “Development of Modernized state scheduling in DVE using state Space approach”, Journal Of Recent trends in Computer science and Engineering, Volume:01, Issue No:01, Page No:06-13, January-June 2013, (ISSN : 2322-0872).

47. **Vimal.S**, Jackins.V, Dhaya.R, Subbulakshmi.P, “Analysis of Router Packet Forwarding & Prioritization in Coagulated Network-A Meritorious Approach”, Journal Of Recent trends in Computer science and Engineering, Volume:01, Issue No:01, Page No:21-27, January-June 2013, (ISSN : 2322-0872).
48. R.Dhaya, R.Kanthavel, **S.Vimal**, “Efficient high performance modified straight line routing for wireless sensor networks”, Journal of Theoretical and Applied Information technology, Volume:51, Issue No:02, Page No:259-263, June 2013, (ISSN : 1992-8645 E-ISSN: 1817-3195 (referred in Annexure-II of Anna University journal),IF 0.113).
49. **S.Vimal**, R.Laxminarayanan, V.Jackins, L.Jerart Julus, “Analysis of Reliable secure transmission for Unobservable Secure Table Driven Protocol”, International Journal of Wireless Communication, Volume: 04, Issue No: 16, Page No:963-966, December 2012, (ISSN : 0974- 9756 -IF 0.572).
50. R.Dhaya, P.Subbulakshmi, **S.Vimal**, V.Jackins, “Blocking Probability Reduction in WDM Networks Using Convertible Wavelength Assignment Techniques”, International Journal of Networking & communication Engineering, Volume: 04, Issue No: 13, Page No: 774-779, September 2012, (ISSN : 0974 – 9713 -IF 0.569).
51. R.Dhaya, **S.Vimal**, R.Kanthavel, “Analysis of WPA in 802.11 Wireless Networks for Security”, International Journal of Networking & communication Engineering, Volume: 04, Issue No: 12, Page No: 743-747, August 2012, (ISSN : 0974- 9713 -IF 0.569).
52. **S.Vimal**, V.Jackins, “The Efficient M-D algorithm - Pattern Discovery in Sequence dataset”, TANTECH - International Journal of Engineering and Technology in Tanzania, Volume: 01, No:1, Issue:02, June 2012, (ISSN : 1821- 6072).
53. **S.Vimal**, V.Jackins, “A Perspective approach of secure and accurate M-D algorithm - Pattern Discovery in Sequence dataset”, International Journal Of Emerging Technologies & Applications in Engineering, Technology & Sciences, Page: 38-43, Volume:05, Issue:02, July –Dec 2012, (ISSN: 0974-3588).
54. R.Kathirvel, T.R.JeraldBeno, **S.Vimal**, “Modernize State Scheduling for deliberating network delay consistence in DVE using SSA for propagated networks”, Technology World, Page:15-30, Volume:03, Issue:02, June 2011, (ISSN: 2180 -1614).

4.2 CONFERENCE PUBLICATIONS

4.2.1 INTERNATIONAL CONFERENCE:

Sl.No	National / International	Title of the Paper	Name of the Conference	Venue	Page no. & Volume	Year of Publication
01.	International Conference	Detecting Wireless LAN MAC Address Spoofing.	ICONS '07	Erode Sengunthar engineering college, Erode.	Nil	2007
02.	International Conference	Revolution of Tarp Protocol in Network Security.	ICONS '07	Erode Sengunthar engineering college, Erode.	Nil	2007
03.	International Conference	An Efficient Secured communication using Biometric Based Authentication & Intrusion	Emics'12 International Conference on Emerging Trends in Computer & Communication	Maria College of Engg & Tech. Nagercoil.	Nil	2012

		Detection in Manet.	Technologies.			
04.	International Conference	A Compatible Survey On Mobile Robot Based Data Collection In Wireless Sensor Networks (Wsn)	E-Gov'12 International conference on E-Governance & Cloud Computing Services 17 th & 18 th Oct 2012	Dr.M.G.R University, Chennai	Volume :1 Pg.No:614 ISBN:978-81-910827-9-1	2012
05.	International Conference	A Meritorious Survey On Implications Existing In Wireless Sensor Attacks And Networks Security Monitoring	E-Gov'12 International conference on E-Governance & Cloud Computing Services 17 th & 18 th Oct 2012	Dr.M.G.R University, Chennai	Volume :1 Pg.No:619 ISBN:978-81-910827-9-1	2012
06	International Conference	Performance of CE-MSK-OFDM for LONG HAUL OPTICAL TRANSMISSION	IEEE(Electron Devices Society) , CSIR sponsored International conference on Circuit, Power and Computing Technologies. 20 th & 21 st March 2014	Noorul Islam University, Thuckalay, Tamilnadu	ICCPCT 223 Page No:105	2014
07	International Conference	Defense against Routing towards Primary User attack in Cognitive Radio Networks	ICICCE'15- International Conference on innovations in Communcations and Computer Engineering 15 th February 2015	Coimbatore Institute of Technology & International Journal for trends in engineering and technology (IJTET)	Page no:40	2015
08	International Conference	Defense against Routing towards Primary User attack in Cognitive Radio Networks	TCIFES 2015- International Conference on Technological Convergence For Information, Food, Health and Energy Security- 1 & 2 May 2015	CSIR-CLRI Indian Society For Education and Environment CAAS Management Research	Isbn:978-93-85517-00-6	2015

09	International Conference	Secure Authentication mechanisms to mitigate PUE attacks for mobile Cognitive Radio networks	IEEE,IEEE CSI,IEEE-ITS & BRNS sponsored International Conference on Computing Technologies and Intelligent Data Engineering	National Engineering college. K.R.Nagar, Kovilpatti	7-9 Jan 2016	Jan 2016
10.	International Conference	Ubiquitous Home Control And Proctoring System Using Iot And Android	International Conference on Green, Intelligent Computing and Communication Systems (ICGICCS 2016)	Hindustan college of engineering and technology, Coimbatore	10-11 ,March 2016	March 2016
11.	International Conference	Secure data packet transmission in Manet using enhanced identity-Based cryptography(eib c)	Sixth International Conference on Recent trends in Engineering and technology(ICRET'2016)	Institute of Research in Engineering and Technology, Vishakhapatnam , Andhra Pradesh	05.12.2016	Dec 2016
12	International Conference	A STOCHASTIC GAME THEORETICAL APPROACH FOR JAMMING ATTACK IN COGNITIVE RADIO NETWORK USING WQLA	ICMR Sponsored International Conference on Advanced Information and Communication Technology'17 (ICAIC 2017)	Karpagam College of Engineering Coimbatore		24-25 Feb 2017
12	International Conference	MITIGATION OF PUE ATTACK USING PSO IN WIRELESS COGNITIVE RADIO NETWORKS	ICASCT'18- Second International Conference on Applied soft computing Techniquess	Kalasalingam University, Krishnankoil	23-03-2018 to 24-03-2018 .	23-03-2018 to 24-03-2018

13.	International Conference	GLUCOSE PREDICTION FOR DIABETIC PATIENTS USING AUTO REGRESSIVE MODEL	International Conference on Applied Science, Engineering and Technology (ICASET-19) to be held on December 30-31, 2019, Pondicherry.	IFERP Pondicherry	Dec 2019	December 30-31, 2019
14.	International Conference	Prediction of Clinical Disease with AI based Multiclass Classification using Naive-Bayes and Random Forest Classifier	The 2020 World Congress in Computer Science, Computer Engineering, and Applied Computing CSCE 2020	July 27-30, 2020 Luxor Hotel (MGM Property), 3900 Las Vegas Blvd. South, Las Vegas, 89109, USA	July 2020	July 27-30, 2020
15.	International Conference	A Hybrid Deep Learning Approach for Detecting and Classifying Breast Cancer using Mammogram Images	The 2020 World Congress in Computer Science, Computer Engineering, and Applied Computing CSCE 2020	July 27-30, 2020 Luxor Hotel (MGM Property), 3900 Las Vegas Blvd. South, Las Vegas, 89109, USA	July 2020	July 27-30, 2020
16.	International Conference	Trend Analysis using Agglomerative Hierarchical Clustering Approach for Time Series Big Data	The 2020 World Congress in Computer Science, Computer Engineering, and Applied Computing CSCE 2020	July 27-30, 2020 Luxor Hotel (MGM Property), 3900 Las Vegas Blvd. South, Las Vegas, 89109, USA	July 2020	July 27-30, 2020
17.	International Conference	Progression Detection of Glaucoma using K-Means and GLCM Algorithm	The 2020 World Congress in Computer Science, Computer Engineering, and Applied Computing CSCE 2020	July 27-30, 2020 Luxor Hotel (MGM Property), 3900 Las Vegas Blvd. South, Las Vegas, 89109, USA	July 2020	July 27-30, 2020

4.2.1 NATIONAL CONFERENCE:

Sl.No	National / International	Title of the Paper	Name of the Conference	Venue	Page no. & Volume	Year of Publication
01.	National	Derived	NCCT 08	Scad college of	Nil	2008

Updated as on 01.03.2020

	Conference	Classification in Wireless Network applications		engineering & technology, Tirunelveli.		
02.	National Conference	Enhanced data acquisition using PSOS for realtime applications.	NCETAC 08	Sasurie college of engineering, Erode.	Nil	2008
03.	National Conference	Analyzing PBS and FCFS on a Grid-Computing Environment.	ACICT 09	PSN college of engineering & technology, Tirunelveli.	Nil	2009
04.	National Conference	Analyzing PBS and FCFS on a Grid-Computing Environment.	NCCCT 09	V.M.K.V university, Salem.	Nil	2009
05.	National Conference	Enhancing rummage around Performance in Unstructured P2P Networks Based on Users'Common Interest.	NACCTR09	Sasurie college of engineering, Erode.	Nil	2009
06.	National Conference	Freight Paired for Cellular/WLAN Assimilated Networks.	ENTECH 09	Anna University Tirunelveli, Tirunelveli.	Nil	2009
07.	National Conference	Automatic Robotic Neural Control using System Analysis design.	RAME 09	M.P.Nachimuthu M.Jaganathan engineering college, Erode.	Nil	2009
08.	National Conference	Superior Broad Band Wireless Access Via Wimax Networks.	NCCCT09	V.M.K.V University.	Nil	2009
09.	National Conference	Superior Broad Band Wireless Access Via Wimax Networks.	National conference on Emerging IT'S	National College of Engineering	Nil	2009
10.	National Conference	Image compression using Fuzzy based Spherical Coding in sub Band Wavelet.	RETEEICOM 10	Mahendra engineering college, Namakkal.	Nil	2010
11.	National Conference	Modernize State Scheduling for Improving Consistency in DVE using State Space Approach.	NCRCNC11	Hindusthan college of engineering & technology, Coimbatore.	Nil	2011

12	National Conference	Verge self - Tracking for wireless sensor network	Emerging trends in Computer Engineering & technology ETCET'13 8 th March 2013	Sri Vidhya college of Engineering & Technology, Virudhunagar	Page:53	2013
13	National Conference	Mobile robot based Data collection in wireless sensor network	Emerging trends in Computer Engineering & technology ETCET'13 8 th March 2013	Sri Vidhya college of Engineering & Technology, Virudhunagar	Page:59	2013
14	National Conference	Secure Verge self Monitoring using End - End Detection of Wormhole Attack inWSN	Second national Conference on Frontiers of computer science and computation technologies- NCFCSCT-2013 12 & 13 April 2013.	Sri Ramakrishna Engineering college, Coimbatore		2013
15	National Conference	Mobile robot based Data collection in wireless sensor network	Second national Conference on Frontiers of computer science and computation technologies- NCFCSCT-2013 12 & 13 April 2013.	Sri Ramakrishna Engineering college, Coimbatore		2013
16.	National Seminar	Security Enhancement in Mobile Electronic Payment	AICTE sponsored National Seminar on New Frontiers in Data Mining (NLSDM) 20 & 21 April 2014.	PSN college of Engineering and Technology, Melathidiyoor	31	2014
17.	National Conference	Emergency health care tracking system for fall detection using smart phone Technology	National Level conference on Embedded Systems(NEC'14) 27 & 28 th March 2014	Anna university Regional Centre- Tirunelveli	1	2014
18	National Conference	Belief Propagation based defense mechanism and efficient routing	Frontiers in Applied sciences and Computer Technology (Fact'15)-third	National Institute of Technology, Trichy	152-156	2015

		in Cognitive Radio Networks	national conference- March 06 th and 07 th			
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4.3 Book/Book chapter publications

1. **Vimal S.**, Suresh A., Subbulakshmi P., Pradeepa S., Kaliappan M. (2020) Edge Computing-Based Intrusion Detection System for Smart Cities Development Using IoT in Urban Areas. In: Kanagachidambaresan G., Maheswar R., Manikandan V., Ramakrishnan K. (eds) Internet of Things in Smart Technologies for Sustainable Urban Development. EAI/Springer Innovations in Communication and Computing. Springer, Cham, DOI:https://doi.org/10.1007/978-3-030-34328-6_14).
2. An Intelligent Grid Network Based on Cloud Computing Infrastructures, DOI: 10.4018/978-1-5225-9023-1.ch006, IGI GLOBAL PUBLISHER, JUNE 2019.
3. Cloud-Based Predictive Maintenance and Machine Monitoring for Intelligent Manufacturing for Automobile Industry, DOI: 10.4018/978-1-5225-9023-1.ch006, IGI GLOBAL PUBLISHER, JUNE 2019.
4. Deep Learning based decision making with WoT for smart city development, CRC press, https://doi.org/10.1201/9780429298462 ,June 2020,page 51 to 63.

5 Funded Projects: Nil

SNo	Title of the project	Funding Agency	Duration	Amount	Status
1					

6 Short term Courses / Seminars /FDP/Workshop/ConferenceAttended:

6.1. List of Faculty Development programs attended:

Sl.No	FDP	Title	Venue	Date	Year
01.	Faculty Development Programme	Core Competency Development.	M.P.Nachimuthu M.Jaganathan engineering college, Erode.	1 st &2 nd September	2007
02.	Centre for Faculty Development Programme	Componet Based Technology	Erode Sengunthar engineering college, Erode.	3 rd to 15 th December	2007
03.	Faculty training Programme	Train the Trainers	National engineering college	20 th & 23 rd December	2011
04	Faculty development Programme	Teaching methodology	National engineering college	09 th &10 th March	2013

05.	IEEE Madras section Sponsored "Faculty development Programme"	Mobile Application development Using Android:A Next Generation technique	National engineering college	14 th &15 th November	2014
06	IITBombayX: FDP101x Foundation Program in ICT for Education	Two-Week AICTE approved FDP,Under the aegis of Pandit Madan Mohanalaviya National Mission for Teachers anTeaching (PMMMNMTT) on Foundation Program in ICT for Education" Passed with 0.93 / 1	NEC-IIT BOMBAY COURSE	08 th March to 12 th April 2018	2018
07	IITBombayX: FDP201x Pedagogy for Online and Blended Teaching-Learning Process	Four-Week AICTE approved FDP,Under the aegis of Pandit Madan Mohan alaviya National Mission for Teachers and Teaching (PMMMNMTT) on Pedagogy for Online and Blended Teaching-LearningProcess"	NEC-IIT BOMBAY COURSE	03 rd May to 18 th June 2018	2018
08	Faculty development Programme	AICTE sponsored QIP Short Term Course on " Smart Sensors and Systems: From Simple Sensing to Internet of Things (IoT) & Cyber Physical Systems (CPS) "	IIT (BHU), Varanasi	22.10.2018 to 27.10.2018	2018
09	Industry-Academia Conclave	PALS- IIT Madras sponsored "Future of the World-Disruptive Technologies, a Game Changer"	IIT Madras Research park	06.07.2019	2019
10	Faculty development Programme	QIP Sponsored programme on"Data Analytics"	IISC Bangalore	22.07.2019 To 26.07.2019	2019
11	Faculty development Programme	Moodle Learning Management System organized by the Department of Information Technology, Guru Nanak Dev Engineering College, Ludhiana, Punjab in association with Spoken Tutorial, IIT Bombay.	IIT BOMBAY COURSE	27 th April 2020 to 1 st May 2020.	2020
12	Faculty development Programme-Industrial Training	Industrial IoT using LoRAWAN	Enthu Technology Solutions India Pvt Ltd, Coimbatore	27.04.2020 to 01.05.2020	2020

13	Faculty development Programme	AICTE- ATAL SPONSORED FDP on “Block chain and applications”	NIT nagaland	22.06.2020 to 26.06.2020	2020
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6.2. List of State/ National /International Level Workshop attended

Sl.No	State/National / International	Title	Venue	Date	Year
01.	State Level Workshop	VLSI design & simulation.	M.P.Nachimuthu M.Jaganathan engineering college, Erode.		2007
02.	National Level Workshop	Soft Computing- New Trends, Research Issues & Applications (WSC’09)	Anna University Tirunelveli, Tirunelveli	March 19 & 20	2009
03.	National Level Workshop	Software Testing.	Hindusthan college of engineering & technology, Coimbatore.		2010
04.	National Level Workshop	Research Opportunities in Embedded Systems & Wireless Communications.	Mahendra engineering college, Namakkal.		2010
05.	National Level Workshop	Parallel and Cloud Computing.	VIT University, Chennai.	February 25 th	2012
06.	Intracollegiate Workshop	Outcome Based education & Accreditation Process	NEC, Kovilpatti	January 26 th	2013
07	National Level Workshop	Workshop on NS2	NEC, Kovilpatti	04.10.2013 & 05.10.2013	2013
08	National Level Workshop	Workshop on 4G Wireless Technology	Anna University, MIT Campus, Chrompet, Chennai	20.02.2014 & 21.02.2014	2014
09	Intracollegiate Workshop	Workshop on quality education and research	IQAC cell NEC, Kovilpatti	06.09.2014	2014
10	National 17 th ISTE TN&P Section Annual Convention For Faculty	Empowering Indian Engineering Education For Global	ISTE NEC, Kovilpatti	07.11.2014 & 08.11.2014	2014

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		Expectations			
11	Intracollegiate Workshop	NPTEL Workshop Sponsored by MHRD, Newdelhi	CENTRAL Library NEC	13.03.2015	2015
12	National Level Workshop	Hands on training in NS2	Department of ECE, NEC, Kovilpatti	05.08.2015 to 07.08.2015	2015
13	Intracollegiate Workshop	Embedded system Design using ARM & PIC microcontroller	IELEC systems Tirunelveli, CSI NEC, Kovilpatti	24.08.2015 & 25.08.2015	2015
14	National Level Workshop	A two day workshop on “Hands on training on Matlab Toolboxes” - HTMT’16	Dept of EEE, NEC, Kovilpatti	3rd & 4th March, 2016	2016
15	National Level Workshop	DST(ICPS) Sponsored National workshop on Data Science Research	VIT University - Chennai Campus Chennai	Nov 30 – Dec 02, 2016.	2016
16	National level workshop	QIP sponsored workshop”Tools for Cyber security-A laboratory course”	IIT Bombay	May 22-26,2017	2017
17	Intercollegiate workshop	Technology Enabled learning by NITTR chennai	NEC, Kovilpatti	May 28-29,2017	2017
18	One Day Workshop	Workshop on Social Networks	Webinar Series	April 30	2020

6.3. List of State/ National technical Level Seminars attended

Sl.No	National / International	Title	Venue	Date	Year
01.	National Level Seminar	Embedded Networking EMNETS 08	Vellammal college of engineering & technology, Chennai	February 11 th	2008
02.	CSIR sponsored National Level Seminar	Soft Computing Techniques for industrial Automation	Kongu engineering college, Erode	February 15 & 16	2008

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03.	NBHM Sponsored National Level Seminar	Mathematical Modeling and Scientific Computation.	Kongu engineering college, Erode.	August 30 & 31	2012
04	Technical Seminar	Media Security:A set theoretic Framework for Data Hiding	National Engineering college, Kovilpatti	August 29	2012
05.	DAE-BRNS Sponsored National Level Seminar	Research Issues in Soft Computing techniques for Nuclear Energy Systems	National Engineering college, Kovilpatti	September 28 & 29	2012
06	Guest Lecture	Research Issues and challenges in Cloud Computing- A Critical Perspective	National Engineering college, Kovilpatti	1 st February	2013
07	DBT Sponsored Seminar	Research & Pragmatic Issues of Cloud Computing Genomic Analysis in bioinformatics Applications	National Engineering college, Kovilpatti	14 th & 15 th March	2013
08	DRDO sponsored Seminar	Language based Formal methods and Verification techniques for Security	National Engineering college, Kovilpatti	2 nd & 3 rd August	2013

6.4. List of Non Funded Programmes organized

Sl.No	Nature of the Programme	National / International	Title of the Programme	Date of Programme
1	Seminar	Intra college-IEEE student Branch Chapter	Introduction to Programmable Logic Control	1 st Sep 2012
2	Seminar	Intra college-IEEE student Branch Chapter	Fundamentals of Matlab and its simulation	29 th Sep 2012
3	Distinguished speaker Programme	Intra college-IEEE student Branch Chapter	Research Issues and challenges in Cloud Computing- A Critical Perspective by Dr.V. Lakshmi Narasimhan, Professor/CSE , East Carolina University, USA	1 st Feb 2013

4	Project Exhibition	National Level	Sipro'13-Inter college Project Exhibition-IEEE student Branch	14 th Feb 2013
5	National Level technical Symposium	National	IGNITE'13-A national Level Technical Symposium	12 th Mar 2013
6	Andriod Training Programme	Inter College Students	Andriod Training Programme-in MOU with Sre seshaa Technologies, Chennai	01.03.2013, 02.03.2013, 08.03.2013 , 09.03.2013 & 11.03.2013
7	Seminar	Inter College Students	Seminar on "Retail domain" -in MOU with Sre seshaa Technologies, Chennai	23.09.2013 & 24.09.2013
8	Project Exhibition	National Level	Sipro'14-Inter college Project Exhibition-IEEE student Branch	14 th March 2014 & 15 th March 2014
9	National Level technical Symposium	National	IGNITE'14-A national Level Technical Symposium	21 st Mar 2014
10	Project Exhibition	National Level	Sipro'15-Inter college Project Exhibition-IEEE student Branch	06 th March 2015 & 07 th March 2015
11	Big Data and Hadoop Development	National Level Summer training program NSTP 2016	National Level Summer training program NSTP 2016-IIT ROORKEE	27.06.2016 TO 03.07.2016
12	Project Exhibition	National Level	Sipro'17-Inter college Project Exhibition-IEEE student Branch	28 th February 2017

7. Short term Courses / Seminars /FDP/Workshop/Conference organized:

Sl.No	Nature of the Programme	Name of the Organisation	Title of the Programme	Grant Received	Date of Programme	Year
1	Seminar	Department of Biotechnology, Government of India. New Delhi	Research & Pragmatic Issues of Cloud Computing Genomic Analysis in bioinformatics Applications	Rs.50,000	14.03.2013 & 15.03.2013	2013
2	CAMP	DST, NewDelhi	Entrepreneur Awareness Camp	Rs.13,500	22.01.2014 To 24.01.2014	2013
3.	Conference	INSA, NewDelhi	Explorations& iNnovations In Advanced Computing – (ENIAC' 14)	Rs.20,000	08.01.2014 To 10.01.2014	2014
4.	FDTP (Faculty Development)	Anna university, Chennai	IT2401-Service Oriented Architecture	Rs.60,000	09.06.2014 To 15.06.2014	2014

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	Training Programme)				(7 Days)	
5.	CAMP	DST, NewDelhi	Entrepreneur Awareness Camp	Rs.20,000	19.01.2015 To 21.01.2015	2015
6.	Seminar	Department of Biotechnology, Government of India. New Delhi	Research Approaches and Contemporary Issues of Functional Genomics, Proteomics & Micro array biological Modeling using machine learning in Bioinformatics Applications.	Rs.40,000	Sanctioned Date 23-10-2014 & 24-10-2014 Conducted on: 13.11.2014 & 14.11.2014	2014
7.	FDTP (Faculty Development Training Programme)	Anna university, Chennai	IT6503-Web Programming	Self Supporting & Approved by AUC	06.06.2016 To 12.06.2016	2016
8	FDP	AICTE, New Delhi	Data science research and bigdata analytics	Rs.3,25,000	11.12.2017 to 21.12.2017	2017
9	FDTP (Faculty Development Training Programme)	Anna university, Chennai	GE8151- PROBLEM SOLVING AND PYTHON PROGRAMMING	Self Supporting & Approved by AUC	04.06.2018 To 11.06.2018	2018
10.	Refresher Programme	AICTE-ISTE Refresher Programme under AICTE-ISTE MOU(Received Funds)	Data Analytics using Deep Learning	Rs.3,00,000	02.11.2020 to 07.11.2020 16.11.2020 to 21.11.2020 14.12.2020 To 19.12.2020	2020
11.	Workshop	IEEE Madras Section	Deep learning With MATLAB	Rs. 20,000	Nov 2020	2020

8. Expert Lectures Delivered :

Sl.No	Nature of the Programme	Name of the Organization	Title of the Programme	Date of Programme
1	Technical Seminar	Dr.Nagaratnam's College of Engineering,Namakkal	Emerging Trends in Neural Cryptography	23.03.2013
2.	DST(NSTEB) Sponsored camp	National Engineering college.K.R.Nagar,Kovilpatti	Entrepreneurship Awareness Camp (TBI in India)	22.01.2014 to 24.01.2014
3.	Anna University Chennai Sponsored	National Engineering college.K.R.Nagar,Kovilpatti	IT2401-Service Oriented Architecture Topic: Developing Components Using EJB	11.06.2014

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	FDTP			
4.	Workshop-IEEE student branch	National Engineering college.K.R.Nagar,Kovilpatti	Android & its applications	02.08.2014
5.	National Level Workshop	Jayaraj Annapackiam CSI college of Engineering,Nazareth	Android Application Development	09.10.2014
6.	DST(NSTEB) Sponsored camp	National Engineering college.K.R.Nagar,Kovilpatti	Entrepreneurship Awareness Camp (R&D Labs and TBI in India)	19.01.2015 to 21.01.2015
7.	Anna University Chennai Approved FDTP	National Engineering college.K.R.Nagar,Kovilpatti	IT 6503 –Web Programming Topic: Cascading style sheet, CSS3 & Website creation	07.06.2016
8	EMC ² Academic Alliance Workshop	National Engineering college.K.R.Nagar,Kovilpatti	workshop on “Data Science and Big Data Analytics Topic: <ul style="list-style-type: none"> • Introduction to Hadoop and mapreduce • Regression analysis using R 	11.08.2017
9	IIT –Bombay spoken Tutorial Workshop	National Engineering college.K.R.Nagar,Kovilpatti	Net beans	17.08.2017
10	EMC ² Academic Alliance Workshop	National Engineering college.K.R.Nagar,Kovilpatti	workshop on “Data Science and Big Data Analytics Topic: <ul style="list-style-type: none"> • Introduction to Hadoop and mapreduce • Regression analysis using R 	14.02.2018
11	AICTE sponsored FDP	National Engineering college.K.R.Nagar,Kovilpatti	Data science research and bigdata analytics a) Regression analysis using R	18.12.2017
12	National Level Symposium	Dr Sivanthi Aditanar College of Engineering- Sacoesium-2020 Tiruchendur	Act as Jurie for the symposium	13.02.2020
13	Science Day 2020 competition	Ramco Institute of Technology, Rajapalayam	Act as Jurie for the science day competition 2020	28.02.2020
14	National Level Workshop	Maulana Abul Kalam Azad University of Technology, West Bengal	Application of Machine Learning and Security Techniques in Smart Healthcare	06.12.2020

9. Online Courses:

- (i) CCNA certified professional (2009)
- (ii) EMC academic associate, Data science and Big data Analytics (June 2017).
- (iii) Completed NPTEL online certification course
 - (a) 10 hours course on “Introduction to Research” and secured 72% during Jan/Feb 2016
 - (b) 20 hours course on “Strategy: An introduction to Game theory” and secured 45% during Jan/Feb 2016
- (iv) 10 hours course on “Introduction to IOT” and secured 78% during Jul-oct 2017
- (v) 10 hours course on “Outcome based pedagogic principles for effective teaching” and secured 68% during Jul-Aug 2017.
- (vi) 12 weeks course on “Business Analytics and data mining Modeling using R - Online” and secured 58% during April-may 2018
- (vii) 4 weeks course on “Business Analytics and data mining Modeling using R- Part-2 - Online” and secured 74% during Aug-Sep 2018
- (viii) 8 Week course on “Big data Computing” and secured 75%(Elite with silver) during Apr-May 2019.
- (ix) 12 weeks course on “Deep Learning” and secured 100% (assignment based score) during Apr-May 2020.

10. Patents filed/awarded

SN o	Application No/type	Title	Inventors	Applicant name	Date of Filing application	Status
1	2020103425 International Country: Australia	An Artificial Intelligence based Solar Powered Glove with Gestures for Deaf and Dumb	Dhiman, Gaurav , Gomathi, S. , Arora, Vinay ,Singh, Krishna Kant ; Vimal, S., Kaliappan, M. , Singh, Akansha , Soni, Mukesh, Kaur, Amandeep ,Saxena, Deepika		13.11.2020	Published On 13.01.2021
2	2020104348 International Country: Australia	ENERGY-EFFECTIVE AND SECURE WIRELESS DATA TRANSFER SCHEME FOR MOBILE NODES IN SMART CITY APPLICATIONS	Dhiman, Gaurav , Gomathi, S. , Arora, Vinay ,Singh, Krishna Kant ; Vimal, S. , Singh, Akansha , Soni, Mukesh, Kaur, Amandeep ,Saxena, Deepika		26/12/2020	Filed
3	Application no: 10-2020-0099721, Patent office number: P20187 International	Drone detection apparatus and method using deep learning	Mi Young Lee , M. Kaliappan , S Vimal, K. Vijayalakshmi , S. Manikandan	Applicant name: Sejong University Industry-Academic Cooperation Foundation,	10.08.2020	Filed

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	patent: Korean patent			Korea		
4	201941038317 A Indian	Global System For Mobile Communication (GSM)	1.A Suresh 2.S.Vimal 3. N.Malarvizhi 4. M.Kaliappan 5.P.Subbulakshmi 6.Neeba E A 7. S. Sasikala		23/09/2019	Published Dt. 25/10/20 19
5	201911040479 Indian	IOT BASED VEHICLE MONITORING SYSTEM USING BEAGLE BONE KIT	Dr. Sanjeev kumar sharma Dr. Arpit jain prof. Santosh gopal nagpure Dr. B. Venkatesh dr. Manju khari Dr. S. Vimal a.arulprakash dr.r.viswanathan		07/10/2019	Filed
6	10-2020- 0075565 Patent office number: P20187 International patent: Korean patent	Landfill leachate management system and method	S. Gopikumar, S. Raja, Y. Harold Robinson, Vimal Shanmuganathan, Hangbae Chang, Seungmin Rho	Patent and law firm Hyun / Lee Soo-cheol	2020-06-22	Filed

11. Program Chair:

1. Acted as **Program chair** in The 12th International Conference on Computer Science and its Applications (CSA2020) Jeju, Korea, Dec. 14-16, 2020, <http://csa-conference.org/2020>, Hosted by KIPS CSWRG, Co-Hosted by **Chongqing University of Post and Telecom, Korea**

2. Acted as **Program chair** -Springer - 3rd International Conference on Computational Intelligence in Pattern Recognition (CIPR- 2021), Institute of Engineering and management West Bengal- 24th & 25th April, 2021

3. Acted as **Program Co-Chair** The 2020 World Congress on Information Technology Applications and Services (World IT Congress 2021), **February 24-26, 2021, Seoul, Korea** , <http://www.worlditcongress.org/2021>

4. Acted as programme committee member in 2nd International Conference on Cloud, Big Data and Web Services, <https://icaita2021.org/cbw/index>, **July 24-25, 2021, London, United Kingdom**

5. Acted as Program Chair The 16th International Conference on Future Information Technology,(FutureTech2021)-April 22-24, 2021, Jeju, South Korea <http://www.futuretech-conference.org/2021/organizing-committee.php>

12. Advisory Board member:

1.ICPSPE2017, INTERNATIONAL CONFERENCE ON SOFT COMPUTING APPLICATIONS TO POWER SYSTEMS & POWER ELECTRONICS at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya university , Kanchipuram, Tamilnadu Kanchipuram(12,13 April 2017) <http://icpspe.in/national.php>.

2 .4thInternational conference on Chip, Circuitry, Current, Coding, Combustion and Composites (I7C-2017)”,at Sri Sairam Engineering College,Anekal,Bangalore,16th -17th November 2017.<http://i7c.in/nab.php>

3. International Conference on “ Multidisciplinary Perspectives In Engineering & Technology (ICMPET-2019) held on 24th - 25th May 2019 at Markapur, Andhra Pradesh. ICMPET - 2019 is being organized by Krishna Chaitanya Institute of Technology. <http://icmpet.com/advisory.php>

13. Organising committee member:

1.2nd World Conference on Applied Science Engineering and Technology (WACET), IFERP, 29th - 30th December, 2016 , Goa , India .
(<http://wcaset.org/org.php>)

2.Acted as Outreach Committee member in International Conference on Big Data and Data Analytics (ICBDDA-16), IFERP, 16th - 17th December 2016, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram, Tamilnadu Kanchipuram (<http://icbdda.in/ocm.php>)

3. organizing committee member 6th International Conference On Applied Science Engineering And Technology (ICASET-18) , organized by IFERP at Pondicherry, India on 29th - 30th December 2018. <http://www.icaset.in/organizing-committee.php>

4.Acted as organizing committee member INTERNATIONAL CONFERENCE ON LATEST TRENDS IN ENGINEERING AND MANAGEMENT,ICLTEM-19, Pondicherry. OCTOBER 20th&21st, 2019. <http://icltem.com/outreach-committee.php>

5. Acted as organizing committee member International Conference On Multidisciplinary Innovation In Academic Research (ICMIAR-19) 20th - 21st December 2019 in Kochi .
<http://icmiar.net/outreach-committee.php>

6. Acted as 5th International Conference on Recent Developments in Science, Engineering and Technology (REDSET 2019) focuses on experimental, theoretical and application aspects of innovations in Data Science and Analytics sponsored by published by SPRINGER -CCIS Series. - GD Goenka School of Engineering- 15-16th November, 2019

7. Acted as Technical Committee member in INTERNATIONAL CONFERENCE ON MACHINE INTELLIGENCE & DATA SCIENCE APPLICATIONS (MIDAS 2020) In ASSOCIATION with "Next Generation Computing Technologies" September 4-5, 2020, University of Petroleum and Energy Studies, Dehradun .<http://www.icmidas.in/tcp.html>

8. Acted as Session Chair at Two days International Web Conference on Smart Engineering Technologies 2020 (IWCSET 2020) on 26th and 27th June 2020 for AI and Data Mining domain at RAMCO INSTITUTE OF TECHNOLOGY, Rajapalayam, Tamilnadu, India

9. Acted as Session Chair for Advanced 2nd INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES IN DATA MINING AND INFORMATION SECURITY (IEMIS 2020) will be held on 2nd and 4th July, 2020 which is organized by the School of Information Technology (Ashram Campus), a unit of Institute of Engineering & Management, Kolkata.

10. Acted as Technical Committee member in International Conference on Innovative Computing and Communication (ICICC-2021) Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi. 20-21st FEBRUARY, 2021

11. Acted as Technical Committee member in 2ND DOCTORAL SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE (DOSCI 2021) 6th March, 2021
Organized by Institute of Engineering & Technology, a constituent college of Dr APJ Abdul Kalam Technical University Lucknow, India

12. Acted as Technical Committee member in International Conference on Computing, Communication, and Intelligent Systems 19th-20th February, 2021 Sharda University, Greater Noida, India. IEEE Conference Record #51004 ISBN No.: 978-1-7281-8529-3, ICCIS 2021. <http://www.icccis.in/>

14. Special Session Organised in Foreign Countries:

1. 2018 International ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI-NCON). ECTI-NCON 2018 is the first annual international conference organized by the **Northern Section of Electrical Engineering/Electrical, Computer, Telecommunications and Information Technology (ECTI) Association, Thailand**

Special Session Title: Energy Enhancement and Security in Cognitive radio Networks"

Chair: S.Vimal, Senior Assistant professor, National Engineering College, Kovilpatti, Tamilnadu, India

2. 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE 2019) during October 15-18, 2019 at Senri Life Science Center, 1-4-2, Shin-Senri-Higashi-Machi, **Toyonaka, Osaka, 560-0082, Japan** (<http://www.ieee-gcce.org/2019/organized.html>)

OS-DAE: DAECRN'19- Data Analytics and Security Enhancement with Applications of Game Theory for Cognitive Radio Networks during

Co-Chair: S.Vimal, Senior Assistant professor, National Engineering College, Kovilpatti, Tamilnadu, India

3. 14th Bi-annual Congress, Congress Theme: **Applied Machine Learning and Artificial Intelligence for Automation in the 21st Century, August 16-20, 2020, Venue: Conference Center, Taipei Tech Taipei, Taiwan, <http://www.wacong.org>**, Sponsored by IEEE,

Special Session Title: Energy conservation and enhancement in wireless cognitive radio networks with Analytics

Chair: S.Vimal, Senior Assistant professor, National Engineering College, Kovilpatti, Tamilnadu, India.

4. Panelist Member in **VCOP 2020: Virtual Conference Organizers' Panel organized by IEEE TENSYP 2020, during 01.07.2020 at Bangladesh Section.**

5. EAI SmartGIFT 2020,VirtualOnline Conference-UK, Special Session Chair: Applications of Game theory for Smart Grids in Cognitive radio Networks, December 12-13,2020

15. Special Session Organised in Indian Countries:

1. ICASISSET 2019,International Conference on Advanced Scientific Innovation in Science, Engineering and Technology

Bharath Institute of Higher Education and Research in the topic

“DAECRN’19- Data analytics and security Enhancement with applications of Game theory for Cognitive radio Networks”(<http://icasiset.com/splsessions.html>) **during April 19th and 20th ,2019**

Chair: S.Vimal, Senior Assistant.professor, National Engineering College, Kovilpatti, Tamilnadu, India

2.3RD INTERNATIONAL CONFERENCE ON INNOVATIVE COMPUTING AND COMMUNICATION (ICICC-2020) ORGANISED BY : SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES, UNIVERSITY OF DELHI, NEW DELHI IN ASSOCIATION WITH NATIONAL INSTITUTE OF TECHNOLOGY PATNA (NITP)

21-23RD FEBRUARY,2020 http://icicc-conf.com/download?filename=SS.003_RADLIM.pdf

Special session: Recent Advances on Deep learning and its impact on Image Processing (RADLIM)

Chair: S.Vimal, Senior Assistant.professor, National Engineering College, Kovilpatti, Tamilnadu, India

3. 2nd International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2020) scheduled during

July 2-3, 2020 at Institute of Engineering & Management, Salt Lake, Kolkata, India.

Session Title: Applications of Game theory to enhance the security and energy monitoring for Cognitive radio Networks

Chair: S.Vimal, Senior Assistant.professor, National Engineering College, Kovilpatti, Tamilnadu, India

4. Technical Committee member in International Conference on Innovative Computing and Communication (ICICC-2021) Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi. 20-21st FEBRUARY, 2021

Session Title: Medical applications in Big Data using deep learning algorithms

Chair: S.Vimal, Senior Assistant.professor, National Engineering College, Kovilpatti, Tamilnadu, India

16. Book Chapter Editor:(Scopus)

1.Deep Neural Networks for Multimodal Imaging and Biomedical Applications - IGI Global (formerly Idea Group Inc.) – November 2019

2. Bioinformatics and Medical applications in Big Data using deep learning algorithms – Wiley & Scrivenier Publisher- Apr 2020

17. Membership in Professional societies

- IEEE professional member(**92174623- Senior Member**)
- ISTE LIFE MEMBER (LM85256)
- ACM Membership (Member Number: 5174395)

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- National book trust life member(BC-274-JSR6DLIC)
- CSTA-ACM annual member(5174395)
- IAENG life Member(140752.)
- Society of Digital Information and Wireless Communication-Member(ID:19145)
- IFERP professional Member

18. Awards and Achievements

I have been nominated as IEEE Brand Ambassador by IEEE , USA for the exemplary service provided in Tamilnadu R8 Region for IEEE.

1. Associate Editor in Journal of Information Processing Systems - ESCI indexed
2. Associate Editor in Human-centric Computing and Information Sciences – SCIE indexed
3. Associate Editor in IET Quantum Communications ESCI indexed
4. Associate Editorial Board Member-Current Engineering Letters-Bentham Publishers.
5. Acted as SCI Indexed Special Issue Editor:
 - Special Issues on “Artificial Intelligence based Smart precision agriculture with analytic pattern in sustainable environments using IoT”- Tech Science- CMC- SCI indexed Journal with IF 4.89
 - Special Issue "HPC with Artificial Intelligence based Deep Video Data Analytics: Models, Applications and Approaches"- CMES-Techscience-SCIE indexed Journal with IF 0.8
 - Special Collection on Smart Sensors to Enhance Sustainable Agriculture – International Journal of Distributed Sensor networks- SAGE publisher-SCIE indexed-IF 1.151
 - LGE -Special Issue on IoT and Deep learning approaches for Intelligent smart precision agriculture- Complex and Intelligent Systems-SCIE Indexed-IF 3.791
 - LGE -Special Issue on Artificial Intelligence Empowered Big Data Analytical Patterns for Medical Applications- Neural Processing letter- Springer-SCIE Indexed-IF 2.8
 - LGE - Special issue on Enabling Technologies for Genomic and sequence analysis Using Artificial Intelligence in Smart medical applications-Springer-SCIE INDEXED-IF 1.5
 - LGE -Special issue on AI based smart precision agriculture using Embedded IoT for sustainable environment – Microprocessor and Microsystems-Springer- SCIE INDEXED-IF 1.161
 - LGE -Special issue on - Enterprise Management Using Business Intelligence based AI-IIoT - Information Technology and Management- Springer – SCIE Indexed IF 1.222.
 - LGE- Special Issue on Applications of AI Empowered Federated Learning Using Mobile Edge computing for IoT- Wireless Personal Communications-SCIE Indexed IF 1.061
 - GE- Special Issue on: "Machine Learning for Energy Efficient Embedded and Computing Systems"- International Journal of Embedded Systems Scopus and ESCI Indexed
 - GE- Special Issue on Machine Learning for Energy Efficient Electronic Circuits and Computing Systems , - IETE Journal of Research - SCIE indexed journal IF 1.125
 - LGE - Special Issue on Explainable Artificial Intelligence (XAI) based Nano-Biological Data Analysis for smart medical applications - CURRENT MEDICAL IMAGING -SCIE indexed journal- IF 0.81
 - LGE- International Journal of Grid and High Performance Computing (IJGHPC)- Special Issue On: Federated Learning based 6G wireless communication using AI with High performance Computing- International Journal of Grid and High Performance Computing (IJGHPC)-SCOPUS AND ESCI INDEXED.
 - LGE- - JIPS journal- Special Issue on AI based Intelligent decision making for Industrial IoT using Fuzzy based systems- JOURNAL OF INFORMATION PROCESSING SYSTEMS - SCOPUS AND ESCI INDEXED.

- LGE- - SI NAME: Next generation 6G based Sensor Networks for Smart City Application- MDPI SENSOR- SCIE indexed journal IF 3.725
- LGE- Journal of Medical Imaging and Health Informatics-Machine Learning for Security-aware Solutions in Internet of Medical Things- SCIE indexed journal IF 0.659
- LGE- Wireless Communications and Mobile Computing- Based Federated Learning for 6G Mobile Networks- SCIE indexed journal IF 1.819
- GE-Innovations and new efforts for Multimedia Applications in Medical Internet of Things- International Journal of Healthcare Information Systems and Informatics (IJHISI)- ESCI and SCOPUS
- LGE - Artificial Intelligence Based Deep Video Data Analytics for High Performance Multimedia Computing Applications- SN Computer Science- Springer
- GE- Blockchain Technology for Sustainable Peer to Peer Electrical Energy Trading- Sustainable Computing: Informatics and Systems (SUSCOM)- SCIE INDEXED- IF 2.798.

Others (Board of studies/Governing Council/Staff Selection/ Reviewer/other duties):

1. Review panel member-Athens journal of Technology and Engineering-ATINER (Athens Institute for Education and Research), Athens, Greece
2. Reviewer in cluster computing-springer
3. Reviewer in Multimedia Tools and applications-springer
4. Reviewer in Wireless networks-springer
5. Reviewer in Wireless personal applications-springer
6. Reviewer in Design issues in embedded systems-springer
7. Reviewer in Journal of supercomputing-springer
8. Reviewer in Concurrency and computational practice-Wiley publisher
9. Reviewer in Inderscience journals.
10. Reviewer in Journal of Web engineering
11. Reviewer in cognitive system research-Elsevier
12. Reviewer in Medical Systems, Springer
13. Reviewer in Advanced Oxidation Technologies, De gryter publisher
14. Reviewer in Journal of Ambient intelligence and humanized computing Springer
15. Reviewer in Security and Communication Networks, Hindawi Publisher
16. Reviewer in IEEE Transactions on Emerging Topics in Computational Intelligence
17. Reviewer in Interdisciplinary Sciences - Computational Life Sciences (INSC)- Springer