

**E.G.S. Pillay Engineering College (Autonomous), Nagapattinam**

**Department of Information Technology**

**Research and Development**

(2018 onwards)

**Ph.D Awarded Faculty Members:**

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Academic Year</b>
01	Dr.K. Manikanda Kumaran	2020-21
02	Dr. S. Manikandan	2020-21
03	Dr.K.Raju	2021-22
04	Dr.R.Lavanya	2021-22

**Ph.D Pursuing Faculty Members:**

<b>Sl. No</b>	<b>Name</b>	<b>University</b>	<b>Status</b>
1	Mrs. K. Nagalakshmi	Vel Tech University	Synopsis Submitted
2	Mr. V.M. Suresh	Anna University	Confirmation Completed
3	Mrs. R.G. Gokila	Anna University	Confirmation Completed
4	Mr. R. Anand Babu	Anna University	Thesis Submitted

**Cumulative Publications (2018-2022) :**

<b>S. No</b>	<b>Name</b>	<b>SCIE</b>	<b>Scopus</b>	<b>Other Referred Journal</b>
1	Dr. P. Vijayalakshmi	-	-	2
2	Dr. A.S. Anankath	4	4	1
3	Dr. S. Manikandan	5	6	1
4	Dr. K. Manikanda Kumaran	2	2	1
5	Mrs. K. Nagalakshmi	-	1	1
6	Mr. V.M. Suresh	-	-	2
7	Mrs. R.G. Gokila	-	-	1
8	Mr. R. Anand Babu	1	1	1
9	Mrs. R. Lavanya	1	2	1
10	Mr. K. Raju	1	1	1

## Research Paper Publications

### SCI/SCI-E Publication

S.No	Paper Title	Journal Name	Authors Name	Volume Number, Issue No and Page No	Online Link
1	Evaluation of Students' Performance in Educational Sciences and Prediction of Future Development using TensorFlow	International Journal of Engineering Education	<b>S.Manikandan</b> M.Chinnadurai	Vol. 36, No. 6, pp. 1–8, 2020, 0949-149X/91, TEMPUS Publications	<a href="https://www.ijee.ie/">https://www.ijee.ie/</a>
2	Cloud-based robotic system for crowd control in smart cities using hybrid intelligent generic algorithm	Journal of Ambient Intelligence and Humanized Computing, Springer	<b>K. Manikanda Kumaran &amp; M. Chinnadurai</b>	<a href="https://doi.org/10.1007/s12652-020-01758-w">https://doi.org/10.1007/s12652-020-01758-w</a>	<a href="https://link.springer.com/article/10.1007/s12652-020-01758-w">https://link.springer.com/article/10.1007/s12652-020-01758-w</a>
3	A Competent Ad-hoc Sensor Routing Protocol for Energy Efficiency in Mobile Wireless Sensor Networks	<i>Wireless Personal Communications</i> , Springer	<b>K. Manikanda Kumaran &amp; M. Chinnadurai</b>	<a href="https://doi.org/10.1007/s11277-020-07741-0">https://doi.org/10.1007/s11277-020-07741-0</a>	<a href="https://link.springer.com/article/10.1007/s11277-020-07741-0">https://link.springer.com/article/10.1007/s11277-020-07741-0</a>
4	Effective Energy Adaptive and Consumption in Wireless Sensor Network Using Distributed Source Coding and Sampling Techniques	<i>Wireless Personal Communications</i> , Springer	<b>Manikandan, S,</b> Chinnadurai, M,	<a href="https://doi.org/10.1007/s11277-021-08081-3">https://doi.org/10.1007/s11277-021-08081-3</a>	<a href="https://doi.org/10.1007/s11277-021-08081-3">https://doi.org/10.1007/s11277-021-08081-3</a>
5	<u>An Identity-Based Secure and Optimal Authentication Scheme for the Cloud Computing Environment</u>	Computers, Materials & Continua	<b>K. Raju,</b> M. Chinnadurai	<i>Vol.69, No.1, 2021, pp.1057-1072,</i>	<a href="https://doi.org/10.32604/cmc.2021.016068">doi:10.32604/cmc.2021.016068</a>
6	An IoT based Green Home Architecture for Green Score Calculation towards Smart Sustainable Cities	KSII Transactions on Internet and Information Systems	<b>K. Manikanda Kumaran, . Chinnadurai, S. Manikandan, S. Palani Murugan, E. Elakiya</b>	VOL. 15, NO. 7, Jul. 2021	<a href="https://doi.org/10.3837/tiis.2021.07.000">https://doi.org/10.3837/tiis.2021.07.000</a>

7	Tour Planning Design for Mobile Robots Using Pruned Adaptive Resonance Theory Networks	Computers, Materials & Continua	Palani Murugan, Chinnadurai, M., <b>Manikandan, S.</b>	70(1), 181–194, doi:10.32604/cmc.2022.016152	doi:10.32604/cmc.2022.016152
8	User Interaction Behavior Analysis for Insider Attack Detecting with Deep Belief Neural Network in Cloud Computing	Computer Systems Science and Engineering	<b>A.S.Anakath</b> R.Kannadasan	Accepted DOI:10.32604/csse.2021.019940  2021	---
9	Computationally efficient and secure anonymous authentication scheme for cloud users	Personal and Ubiquitous Computing	<b>A.S.Anakath</b> S.Rajakumar	<a href="https://doi.org/10.1007/s00779-021-01566-9">https://doi.org/10.1007/s00779-021-01566-9</a>  2021	<a href="https://doi.org/10.1007/s00779-021-01566-9">https://doi.org/10.1007/s00779-021-01566-9</a>
10	A novel RSA algorithm for secured key transmission in a centralized cloud environment	International journal of Communication System	S. Ambika, S.Rajakumar <b>A.S.Anakath</b>	Vol 33, PP 1-9, 2020.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.4280">https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.4280</a>
11	Virtualized Load Balancer for Hybrid Cloud Using Genetic Algorithm	<i>Intelligent Automation &amp; Soft Computing</i>	<b>Manikandan, S,</b> Chinnadurai, M,	32(3), 1459–1466	<a href="https://doi.org/10.32604/iasc.2022.022527">doi:10.32604/iasc.2022.022527</a>
12	Intrusion Detection System for Energy Efficient Cluster Based Vehicular Adhoc Networks	<i>Intelligent Automation &amp; Soft Computing</i>	<b>R.Lavanya</b> Kannan.S	32(1), 323-337	DOI:10.32604/iasc.2022.021467
13	Deep Sentiment Learning for Measuring Similarity Recommendations in Twitter Data	<i>Intelligent Automation &amp; Soft Computing</i>	<b>S. Manikandan,</b> P. Dhanalakshmi, K. C. Rajeswari, A. Delphin Carolina Rani	Vol.34, No.1, pp. 183-192, 2022,	DOI:10.32604/iasc.2022.023469
14	Speech Quality Enhancement Using Phoneme with Cepstrum Variation Features	<i>Intelligent Automation &amp; Soft Computing</i>	K. C. Rajeswari, R. S. Mohana, <b>S. Manikandan,</b> S. Beski Prabaharan	Vol.34, No.1, pp. 65-86, 2022,	DOI:10.32604/iasc.2022.022681
15	Bat-Inspired Optimization for Intrusion Detection Using an Ensemble Forecasting Method	<i>Intelligent Automation &amp; Soft Computing</i>	<b>R. Anand Babu,</b> S. Kannan	Vol.34, No.1, pp. 307-323, 2022,	DOI:10.32604/iasc.2022.024098

16	Fingerprint Agreement Using Enhanced Kerberos Authentication Protocol on M-Health	<i>Computer Systems Science and Engineering</i>	<b>A. S. Anakath,</b> S. Ambika, S. Rajakumar, R. Kannadasan, K.S.SendhilKumar	Vol.43, No.2, pp. 833-847, 2022	DOI:10.32604/csse.2022.022329
17	Bat-Inspired Optimization for Intrusion Detection Using an Ensemble Forecasting Method	<i>Intelligent Automation &amp; Soft Computing</i>	<b>Anand Babu, R &amp;</b> Kannan	vol. 34, no. 1, pp. 307-323, 2022	DOI:10.32604/iasc.2022.024098

**Scopus:**

S.No	Paper Title	Journal Name	Authors Name	Volume Number, Issue No and Page No	Online Link
1	Intelligent and Deep Learning Collaborative method for E-Learning Educational Platform using TensorFlow	Turkish Journal of Computer and Mathematics Education	<b>Manikandan S</b>	Vol.12 No.10 (2021), E-ISSN: 1309-4653, 2669-2676	<a href="https://turcomat.org/index.php/turkbilmate/article/view/4881/4104">https://turcomat.org/index.php/turkbilmate/article/view/4881/4104</a>
2	Computation of Automatic Logistic Handling Using Artificial Intelligence in Data Mart Applications	Annals of the Romanian Society for Cell Biology	<b>Manikandan S</b>	25(6), 9422–9426, E-ISSN: 1583-6258	<a href="https://www.annalsofrscb.ro/index.php/journal/article/view/7233">https://www.annalsofrscb.ro/index.php/journal/article/view/7233</a>
3	Prediction of Human Motion Detection in Video Surveillance Environment Using Tensor Flow	International Journal of Advanced Science and Technology	<b>Manikandan S,</b> Chinnadurai M, Thiruvenkatasuresh M.P, Sivakumar M	Vol. 29 No. 05 (2020)	<a href="http://sersc.org/journals/index.php/IJAST/article/view/11386">http://sersc.org/journals/index.php/IJAST/article/view/11386</a>
4	Real Time Traffic Flow Prediction and Intelligent Traffic Control from Remote Location for Large-Scale Heterogeneous Networking using TensorFlow	International Journal of Future Generation Communication and Networking	<b>S.Manikandan,</b> M.Chinnadurai, D.Maria Manuel Vianny and D.Sivabalaselvamani	ISSN: 2233-7857, Vol.13, No.1, (2020), pp.1006-1012	<a href="http://sersc.org/journals/index.php/IJFGCN/article/view/7557/4410">http://sersc.org/journals/index.php/IJFGCN/article/view/7557/4410</a>

5	Dynamic Cued Click Point Algorithm to Provide Cryptographic Password Authentication	International Journal of Pure and Applied Mathematics	P. Ashok,R.R. Prianka, R. <b>Lavanya, R.G. Gokila</b>	Volume 117 No. 21 2017, 961-965	<a href="https://acadpubl.eu/jsi/2017-117-20-22/articles/21/85.pdf">https://acadpubl.eu/jsi/2017-117-20-22/articles/21/85.pdf</a>
6	A Comparison survey paper on Block chain technology, Bit coin and Ethereum	International Journal of Psychosocial Rehabilitation	Ashok. P, <b>Lavanya. R</b> , Vidhya V, Karthick. K, Mohammed Sanjarkhan	Volume 24, Issue 6, page no 6448-6452,2020	<a href="https://www.psychosocial.com/article/PR260649/18414/">https://www.psychosocial.com/article/PR260649/18414/</a>
7	Evolution of Nature-inspired Intelligent Robots – A Review	International Journal of Computer Science and Information Security (IJCSIS)	V. Sathiya, Dr. M. Chinnadurai <b>R. Anand Babu, K. Nagalakshmi</b>	Vol. 15, No. 10, October 2017 pp. 257-263	<a href="https://sites.google.com/site/ijcsis/vol-15-no-10-oct-2017">https://sites.google.com/site/ijcsis/vol-15-no-10-oct-2017</a>
8	Criticality-aware partitioned task scheduling with limited migratory on multicore platforms	<a href="#">Journal of Industrial Pollution Control</a>	<b>Nagalakshmi, K</b> Gomathi, N	33(2)(2017) pp 1745-1753	<a href="https://www.icontrolpollution.com/peer-reviewed/criticalityaware-partitioned-task-scheduling-with-limitedmigratory-on-multicore-platforms-86777.html">https://www.icontrolpollution.com/peer-reviewed/criticalityaware-partitioned-task-scheduling-with-limitedmigratory-on-multicore-platforms-86777.html</a>
9	Criticality-cognizant Clustering-based Task Scheduling on Multicore Processors in the Avionics Domain	International Journal of Computational Intelligence Systems	<b>Nagalakshmi, K.</b> Gomathi, N	<a href="#">Volume 11, Issue 1</a> , 2018, Pages 219 - 237	<a href="https://doi.org/10.2991/ijcis.11.1.17">https://doi.org/10.2991/ijcis.11.1.17</a>
10	Recognition of Font and Tamil Letter in Images using Deep Learning	Applied Computer Science	<b>Manikandan Sridharan</b> , Delphin Carolina Rani Arulanandam, Rajeswari K Chinnasamy, Suma Thimmanna, Sivabalaselvamani Dhandapani	vol. 17, no. 2, pp. 90–99, 2021,	doi: 10.23743/acs-2021-15
11	Creating a Novel Consensus Algorithm for Distributed	International Journal of Innovative Technology and	R.Kannadasan, <b>A.S.Anakath</b>	Volume-9 Issue-1S, November 2019.	<a href="https://www.ijitee.org/wp-content/uploads/papers/v9i1S/A10591191S19.pdf">https://www.ijitee.org/wp-content/uploads/papers/v9i1S/A10591191S19.pdf</a>

	Computing use Cases	Exploring Engineering			
11	Deepq: Residue analysis of localization images in large scale solid state physical environments	AIP Conference Proceedings	<b>S. Manikandan</b>	2393, 020078 (2022)	<a href="https://doi.org/10.1063/5.0074142">https://doi.org/10.1063/5.0074142</a>

### Google Scholar Citations Details:

S. No	Name	Citations	h-Index	i10-Index
1	Dr. P. Vijayalakshmi	4	1	-
2	Dr. A.S. Anankath	53	3	2
3	Dr. S. Manikandan	141	6	5
4	Dr. K. Manikanda Kumaran	29	3	1
5	Mrs. K. Nagalakshmi	12	1	-
6	Mr. V.M. Suresh	48	2	2
7	Mrs. R.G. Gokila	6	1	-
8	Mr. R. Anand Babu	2	1	-
9	Dr. R. Lavanya	22	3	-
10	Dr. K. Raju	20	3	-

### Scopus Publication and Citation Details:

S.No	Name of the Faculty	Number of Documents	Citation by Documents	h-Index
1	Dr.S.Manikandan	10	24	3
2	Dr.A.S.Anakath	5	16	2
3	Dr.K.Manikanda Kumaran	2	10	2
4	Ms.K.Nagalakshmi	2	2	1
5	Mr.V.M.Suesh	2	18	1
6	Mr.K.Raju	1	-	-
7	Ms.R.Lavanya	1	-	-
8	Mr.R.Anand Babu	1	-	-

**Book Chapter:**

S.No	Chapter Title`	Chapter Name	Authors Name	ISBN No	Online Link
1	Enterprise Java Beans (EJB) Running Procedure	International Society for Green, Sustainable Engineering and Management, National Board of Quality Promotion, QCI, Govt of India	S.Manikandan	978-81-930406-6-9	Hard Copy
2	APPLICATIONS OF IT AND ITeS IN TODAY'S WORLD	Technical Pages, IEI - TLC - NEWS, In-House News Letter of Institution of Engineers (India), Tiruchirappalli Local Centre,	S.Manikandan	2018/01-02	<a href="https://drive.google.com/file/d/1k_xWIHX-bdRji6KydHjSURUml9WIBILS/view">https://drive.google.com/file/d/1k_xWIHX-bdRji6KydHjSURUml9WIBILS/view</a>
3	Deep Learning in Artificial Intelligence	IEEE India Council	S.Manikandan M.Chinnadurai	Vol.13, No.2, July'2018	<a href="https://site.ieee.org/indiacouncil/newsletter/">https://site.ieee.org/indiacouncil/newsletter/</a>
4	Review of Momo attack in WhatsApp	IEEE India Council	S.Manikandan	Vol.13, No.3, September'2018	<a href="https://site.ieee.org/indiacouncil/newsletter/">https://site.ieee.org/indiacouncil/newsletter/</a>
5	Driving Artificial Intelligence into IT and ITES	The Institution of Engineers (IEI) Annual Technical Volume of Computer Engineering Division Board	S.Manikandan M.Chinnadurai	978-81-938404-4-3, Vol.2, 2018	<a href="https://drive.google.com/file/d/14y412BjVthMDY3I9TF7hnHFHgsVZQxiy/view">https://drive.google.com/file/d/14y412BjVthMDY3I9TF7hnHFHgsVZQxiy/view</a>
6	Artificial Intelligence in Education Using Gaming and Automatization with Courses and Outcomes Mapping	Empowering Artificial intelligence Through Machine Learning Apple Academic Press, CRC Taylor and Francis Book	S.Manikandan M.Chinnadurai	9781771889308	<a href="https://www.appleacademicpress.com/empowering-artificial-intelligence-through-machine-learning-/9781771889308?fbclid=IwAR2rKEx2_p0cUqdVkjKwFctmEE2cgnSt1KSFCCZ4XdolbBJGaNX2srKTPg">https://www.appleacademicpress.com/empowering-artificial-intelligence-through-machine-learning-/9781771889308?fbclid=IwAR2rKEx2_p0cUqdVkjKwFctmEE2cgnSt1KSFCCZ4XdolbBJGaNX2srKTPg</a>

### International Participation:

1. **S.Manikandan**, Presented paper on "Intelligent Genetic Algorithm Usage and Implementation", International Seminar on Innovations in Engineering and Sciences at Multimedia University, Melaka Campus, Malaysia, 22/06/2018
2. **S.Manikandan**, Presented paper on "Measuring Life Time of Electro Magnetic Computation in Wireless Sensor Network using NP-Complete Optimization" at International Congress on Super Computing 2018 (ICSC 2018) in Association of Scientists Developers and Faculties (ASDF) held at Holiday Inn Bangkok, Silom, Kindom of Thailand dated from 18-October-2018 to 20-October-2018
3. **S.Manikandan**, Invited Talk, 8th International Symposium on Innovative Multidisciplinary Research in Green Development at South Eastern University of Sri Lanka on 17th& 18th December'2018 on the topic of "Intelligent Genetic Algorithm Usage and Implementation in Library Dataset using Amazon Red Shift"
4. **K. Raju**, Invited Talk, 8th International Symposium on Innovative Multidisciplinary Research in Green Development at South Eastern University of Sri Lanka on 17th& 18th December'2018 on the topic of "Secure Deduplication with Identity based broadcast Encryption technique "
5. **S.Manikandan** and Dr.M.Chinnadurai, "A SURVEY ON INTELLIGENT SYSTEM IN IT AND ITES", International Conference on Emerging Trends in Engineering , Science and Technology, Bangkok, Thailand at the conference on 20th Jan - 21st Jan'2020, International Institute of Education, Research and Development, pp.51-53 (proceedings)
6. **K.Manikanda Kumaran** and Dr.M.Chinnadurai, "Improved Consistency and Efficiency in WSN", International Conference on Emerging Trends in Engineering , Science and Technology, Bangkok, Thailand at the conference on 20th Jan - 21st Jan'2020, International Institute of Education, Research and Development, pp.47-50 (proceedings)
7. **S.Manikandan**, "Block Chain Technology: Myths, Ethics and Current Trends in IT and ITES", 9th Annual Research Session - 2020 on 25/11/2020, Integrated Applied Sciences and Smart Technologies for Sustainable Development at South Eastern University of Sri Lanka ([Link](#))
8. R. Kannadasan, R. S. Kumar, K. S. Devineni, N. Prabakaran, **A. S. Anakath** and A. Jayanthiladevi, "Vehicle Navigation Protocol in Real-Time Fleet Management," 2020 International Conference on Emerging Smart Computing and Informatics (ESCI), 2020, pp. 248-251, doi:10.1109/ESCI48226.2020.9167608.
9. **A.S.Anakath**, R. Kannadasan, S.Rajakumar and S.Ambika, "Trust Information Management System for Cloud Service Providers", Proceedings - 9th South Eastern University International Arts Research Symposium – 2020, Faculty of Arts and Culture, South Eastern University of Sri Lanka, 19th January 2021, ISBN: 978-955-627-253-6.

### Patent (Published)

1. End to End Food Safety and Quality Control System - Application Number- 202041036571, Journal Number- 37/2020, Journal Date- 11/09/2020 - Published - [Link](#)
2. A novel Multiple-Access Edge Computing technique for ultra-reliable low-latency communication (URLLC), and massive Internet of Things (IoT) in 5G networks - 202041014796 - Published - [Link](#)
3. Automated vegetation mapping approach of crops through satellite image fusion and convolution neural networks-based classification - 202041014696 - Published - [Link](#)
4. Solar Lantern Powered Solar Chulla - Docket No: CBR No-38473, 201741044998, 14-12-2017 ([Link](#)) ([Details](#))
5. PORTABLE EGG QUALITY ASSESSMENT AND MONITORING SYSTEM USING IOT - Application Number: 202041047668, 13/11/2020 ([Details](#))



6. IOT Based Real Physico-Chemical Parameters Monitoring System in Mangrove Zone, Application No. 202141031081 A, The Patent Office Journal No. 29/2021 Dated 16/07/2021
7. AGRY-DRONE: A DYNAMIC WEB BASED DRONE DRIVEN CROP YIELD ESTIMATION MODEL FOR AGRICULTURE FARMS - Application Number - 202241001415, 11/01/2022
8. GREEN SCORE CALCULATION APPARATUS AND METHODS TOWARDS SMART SUSTAINABLE CITIES - Application Number: 202141032008, 30/07/2021
9. INTELLIGENT VIRTUAL REALITY KIT TO SUCCEED IN FACE INTERVIEWS - Application Number - 202241010100, 25/02/2022