



# E.G.S. Pillay Engineering College

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Old Nagore Road, Thethi, Nagore Village, Nagapattinam – 611002, Tamil Nadu, India

## Department of Information Technology

### List of Journals Published- 2024-25

S.No	Name of the Staff	Title of the Research paper	Journal	DOI	Category	Month & Year
1	Dr.S.Manikandan	Optimizing connectivity: a novel AI approach to assess transmission levels in optical networks	The Journal of Supercomputing	<a href="https://doi.org/10.1007/s11227-024-06410-4">https://doi.org/10.1007/s11227-024-06410-4</a>  Volume 80, pages 26568–26588	SCIE	July 2024
2	Dr.S.Manikandan	Efficient energy consumption in hybrid cloud environment using adaptive backtracking virtual machine consolidation	Scientific Reports	<a href="https://doi.org/10.1038/s41598-024-72459-z">https://doi.org/10.1038/s41598-024-72459-z</a>	SCIE	September 2024
3	K.Nagalakshmi , K Raju, R Lavanya	Tracking perishable foods in the supply chain using chain of things Technology	Scientific Reports	<a href="https://doi.org/10.1038/s41598-024-72617-3">https://doi.org/10.1038/s41598-024-72617-3</a>	SCIE	September 2024
4	Dr.G.Arul Selvan	Routing attacks detection in MANET using trust management enabled hybrid machine learning	Wireless Networks- Springer	<a href="https://doi.org/10.1007/s11276-024-03846-7">https://doi.org/10.1007/s11276-024-03846-7</a>	SCIE	October 2024



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## List of Journals Published- 2023-24

S.No	Name of the Staff	Title of the Research paper	Journal	DOI	Category	Month & Year
1	Dr.K Raju, Dr. R Lavanya	Blockchain Assisted Cloud Security and Privacy Preservation using Hybridized Encryption and Deep Learning Mechanism in IoT-Healthcare Application	Journal of Grid Computing	<a href="https://doi.org/10.1007/s10723-023-09678-7">https://doi.org/10.1007/s10723-023-09678-7</a>	SCIE	June 2023
2	Dr.S. Manikandan	Review of Feedback Analysis of Business Process Outsourcing	Migration Letters & The London Publishers	<a href="https://doi.org/10.59670/ml.v20iS13.6465">https://doi.org/10.59670/ml.v20iS13.6465</a>	Scopus	December 2023
3	R G Gokila	Intrusion detection in big data environment using hybrid deep learning algorithm (VAE-CNN)	Journal of Intelligent & Fuzzy Systems	DOI: 10.3233/JIFS-234311  vol. 45, no. 5, pp. 8637-8649, 2023	SCIE	November 2023
4	Ms. Nagalakshmi,K	Digital Innovation and Transformation during the COVID-19 Pandemic and Beyond	Technische Sicherheit	DOI:22.8342.TSJ.2024.V24.3.01301	Scopus	March 2024
5	Dr.S. Manikandan	Intelligent Optimization Framework for Future Communication Networks using Machine Learning	Data and Metadata	DOI: <a href="https://doi.org/10.56294/dm2024277">https://doi.org/10.56294/dm2024277</a> Vol. 3 (2024)	Scopus	January 2024
6	Dr.S. Manikandan	Smart Commodities Public Distribution System using IoT	Salud, Ciencia y Tecnología - Serie de Conferencias	doi: 10.56294/sctconf2024624  vol 2	Scopus	January 2024
7	Dr.S. Manikandan	Location based Access Privileges and Controlling the Clustering in Sustainable 5G Challenges	Salud, Ciencia y Tecnología - Serie de Conferencias	doi: 10.56294/sctconf2023402  vol 2	Scopus	January 2024
8	Dr.S. Manikandan	Learning Of Energy Efficient And Network	Journal of Theoretical	<a href="http://jatit.org/volumes/Vol">http://jatit.org/volumes/Vol</a>	Scopus	February



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		Traffic Delay In Wireless Networks Using Channel Aware Routing	and Applied Information Technology	102No3/23Vol102No3.pdf Vol. 101. No. 3-- 2024		2024
9	Dr.S. Manikandan	Unveiling the Multifaceted Implications of Artificial Intelligence Adoption on Sustainable Development: Perspectives and Hurdles	international Journal of Intelligent Systems And Applications In Engineering	<a href="https://ijisae.org/index.php/IJISAE/article/view/5069/3776">https://ijisae.org/index.php/IJISAE/article/view/5069/3776</a> Vol. 12 No. 19s	Scopus	February 2024
10	Dr.S. Manikandan	Factors driving business intelligence adoption: an extended technology-organization-environment framework	Indonesian Journal of Electrical Engineering and Computer Science (IJECS)	DOI: <a href="http://doi.org/10.11591/ijeecs.v34.i3.pp1893-1903">http://doi.org/10.11591/ijeecs.v34.i3.pp1893-1903</a> Vol 34, No 3	Scopus	March 2024



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## List of Journals Published- 2022-23

S.No	Name of the Staff	Title of the Research paper	Journal	DOI	Category	Month & Year
1	K Nagalakshmi, R Lavanya	Reshaping healthcare supply chain using chain-of-things technology and key lessons experienced from COVID-19 pandemic	Socio-Economic Planning Sciences	<a href="https://doi.org/10.1016/j.seps.2023.101510">https://doi.org/10.1016/j.seps.2023.101510</a>  Volume 85, February 2023, 101510	SCIE	January 2023
2	Manikanda Kumaran K	An IoT based environment conscious green score meter towards smart sustainable cities	Sustainable Computing: Informatics and Systems	Volume 37 <a href="https://doi.org/10.1016/j.suscom.2022.100839">https://doi.org/10.1016/j.suscom.2022.100839</a>	SCIE	January 2023
3	R G Gokila	A Novel Machine Learning-Based Model for Network Attack Detection in Cyber Security Using Big Data	Journal of Environmental Protection and Ecology	<a href="https://scibulcom.net/en/article/Um8crAKfgY4xpMJcbotO">https://scibulcom.net/en/article/Um8crAKfgY4xpMJcbotO</a>  Vol. 24, Issue 4, pp. 1401-1412	Scopus	April 2023
4	K Nagalakshmi,	Laxity-Aware Mixed-Criticality task Scheduling For Energy-Efficient Heterogeneous Multicore Processors	Journal of Theoretical and Applied Information Technology	Vol.101. No 10 <a href="https://www.jatit.org/volumes/Vol101No10/3Vol101No10.pdf">https://www.jatit.org/volumes/Vol101No10/3Vol101No10.pdf</a>	Scopus	May 2023



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## CONFERENCE PROCEEDING / BOOK CHAPTER 2024-25

S.No	Authors Name	Paper Title	Conference	Volume Number, Issue No and Page No	Online Link
1	K. Raju, R. Lavanya, K. Nagalakshmi,	AquaNet: A Quality Monitoring System for Rural Potable Water Distribution Scheme Using Smart Things	International conference on Responsible water Management and Circular Economy	<b>Springer Conference</b> Volume1, Issue 1, PP 89-109 -2024	<a href="https://link.springer.com/chapter/10.1007/978-3-031-60436-2_7">https://link.springer.com/chapter/10.1007/978-3-031-60436-2_7</a> May 2024
2	Dr.S.Manikandan	Sustainable Data Analysis in Engineering: 6- Year Review Emphasizing Open-Source Tools, Eco-Friendly Practices, and Emerging Trends for Smart Computing	10th International Conference on Smart Computing and Communication (ICSCC)	<b>IEEE Conference</b> <b>p ISBN:979-8-3503-6311-1</b>	10.1109/ICSCC62041.2024.10690466 October 2024
3	Ms.S.Soundharya	Machine Learning based Indian Stock Market Forecasting	1 <sup>st</sup> international Conference on Data, Computation and Communication	<b>IEEE Conference</b>	November 2024
4	Ms.S.Soundharya	A Hybrid Intrusion Detection System Using Explainable AI for Enhanced Accuracy and Transparency	3 <sup>rd</sup> international Conference on Electronics and Renewable systems	<b>IEEE Conference</b>	February 2025
5	K. Manikanda Kumaran; S. Manikandan	A Comparative Analysis of Machine Learning Algorithms for Healthcare Applications	4th International Conference on Advancement in Electronics & Communication Engineering (AECE)	<b>IEEE Conference</b>	10.1109/AECE62803.2024.10911687 March 2025
6	K. Manikanda Kumaran; S. Manikandan	Design and Implementation of Battery Management and Wireless Charging in Electric Vehicles Using IoT	10th International Conference on Communication and Signal Processing (ICCSP)	<b>IEEE Conference</b>	10.1109/ICCSP60870.2024.10543779 June 2024
7	Dr.K.Raju	Enhancing smart farming through chain-of things (COT) architecture: A Comprehensive study on IoT and Blockchain integration	8 <sup>th</sup> international conference on Micro Electronics and Telecommunication Engineering	<b>Springer Conference</b>	December 2024



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## 2023-24

S.No	Authors Name	Paper Title	CONFERENCE	Volume Number, Issue No and Page No	Online Link
1	S Ambika	Benchmarking of Various Multicore Processors with Different Operating Systems	Proceedings of the International Conference on Applications of Machine Intelligence and Data Analytics	Volume – 105, Pages - 439 <b>Scopus Conference</b>	10.2991/978-94-6463-136-4_37 May 2023.
2	S Ambika	Hybrid Functional Link Neural Networks for Soybean Price Forecast	International Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022)	Pages: 569-581 2023 <b>Scopus Conference</b>	10.2991/978-94-6463-136-4_48 May 2023.
3	S Ambika	Optimization of page rank algorithm using parallelization method	AIP Conf. Proc 2nd International Conference On Recent Advances In Computational Techniques	2755, 020011 (2023) <b>Scopus Conference</b>	<a href="https://doi.org/10.1063/5.0153296">https://doi.org/10.1063/5.0153296</a> September 2023
4	Lavanya Raju, Preethi S; Raju Karthikeyan	Data privacy preserving for efficient query services using RASP for a health record transaction in a two-cloud secure database	Biopolymer, Smart Materials and Engineering Materials	Volume 3042, Issue 1, Pages - 020028-1 - 020028-13 - 2023 <b>Scopus Conference</b>	<a href="https://doi.org/10.1063/5.0193944">https://doi.org/10.1063/5.0193944</a> March 2024
5	Dr.S. Manikandan	A GPS-based Face Attendance Register System using Android Applications stored in the Cloud	11th International Conference on Computing for Sustainable Global Development (INDIACom)	<b>IEEE Conference</b>	10.23919/INDIACom61295.2024.10498447 April 2024
6	Dr.S. Manikandan	Intelligent Gen: An Efficient On-Demand Access Protocol in MANETs using Network Simulator - 2	Computing for Sustainable Global Development (INDIACom)	<b>IEEE Conference</b>	10.23919/INDIACom61295.2024.10498890 April 2024
7	K. Nagalakshmi	Mobile Robot Multi-Objective Trajectory Planning with Velocity obstacles	Second International Conference on Emerging Trends in Information Technology and Engineering (ICETITE)	<b>IEEE conference</b>	DOI: 10.1109/ic-ETITE58242.2024.10493657 April 2024



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## 2022-23

S.No	Authors Name	Paper Title	CONFERENCE / Book Chapter	Volume Number, Issue No and Page No	Online Link
1	S. Manikandan	Deepq: Residue analysis of localization images in large scale solid state physical environments	AIP Conf. Proc. 2393, 020078 (2022)	Volume 2393, Issue 1  <b>Scopus Conference</b>	<a href="https://doi.org/10.1063/5.0074142">https://doi.org/10.1063/5.0074142</a>  May 2022
2	Dr.S.Manikandan	Course and Programme Outcomes Attainment Calculation of Under Graduate Level Engineering Programme Using Deep Learning	Emerging Technologies in Data Mining and Information Security. Advances in Intelligent Systems and Computing, Springer	pp 335–343  <b>Springer Conference</b>	<a href="https://doi.org/10.1007/978-981-19-4676-9_28">https://doi.org/10.1007/978-981-19-4676-9_28</a>  September 2022
3	Dr.S.Manikandan	Performance Comparison of Various Wireless Sensor Network Dataset using Deep Learning Classifications	IEEE 2nd International Conference on Mobile Networks and Wireless Communications (ICMNBC)	pp. 1-4  <b>IEEE Conference</b>	10.1109/ICMNBC56175.2022.10032015  February 2023
4	Dr.S.Manikandan	Intelligent Outlier Detection for Smart Farming Application using Deep Neural Network	IEEE 2nd International Conference on Mobile Networks and Wireless	Pp 1 – 5  <b>IEEE Conference</b>	10.1109/ICMNBC56175.2022.10031638  February 2023



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## Book Chapters (2022-2025)

S.No	Authors Name	Paper Title	Book Chapter	Volume Number, Issue No and Page No	Online Link
1	K. Nagalakshmi, R. Anand Babu, K. Raju, R. Lavanya	Exploring the Driving and Restraining Forces to Fostering Blockchain in Sustainable Supply Chain in the Context of COVID-19 Pandemic	<b>Book Chapter</b> <b>Taylor &amp; Francis Group</b>  Blockchain Technology in Supply Chain Management for Society 5.0	eBook ISBN9781003177432  Chapter 5	<a href="https://doi.org/10.1201/9781003177432">https://doi.org/10.1201/9781003177432</a>  December 2022
2	S Ambika	Centralized key distribution protocol using identity-based encryption techniques in cloud computing environments	<b>Book Chapter</b> <b>Taylor &amp; Francis Group</b> Secure Data Management for Online Learning Applications	Pages: 111-134  <b>Chapter 6</b>  eBook ISBN 9781003264538	<a href="https://doi.org/10.1201/9781003264538">https://doi.org/10.1201/9781003264538</a>  April 2023





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## Department of Information Technology

### BOOK PUBLICATION

S.NO	BOOK TITLE	AUTHORS	YEAR OF PUBLICATION	ISBN	Publishers
1.	Deep Learning and Its Applications	Dr.S. Manikandan	2022	978-81-957614-4-9	Quing Publications
2.	Deep Learning	Dr.K.Raju, Dr.R.Lavanya	2023	978-93-5757-828-8	Scientific International Publishing house
3.	Industrial Revolution and Metaverse industry 5.0	Dr.S. Manikandan	2023	978-81-963865-2-8	Quing Publications
4.	Cloud Computing	Dr.R.Lavanya , Dr.K.Raju,	2024	978-93-6260-404-0	Charulatha Publications
5.	Social Network Security	Dr.K.Raju, Mrs S.Preethi, Ms.V.Surya.	2024	978-93-6674-032-4	Scientific International Publishing house
6.	Block Chain and Digital Twin Technologies for Building Smart Development	Dr. S. Manikandan	2024	978-81-981247-2-2	Quing Publications
7.	Introduction to operating Systems	Dr.G.Arul Selvan Dr.N.Murali	2024	978-93-6260-045-5	Charulatha Publications



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## Department of Information Technology

### Copyrights (2022-2025)

S.NO	Name and Address of the applicant	Registration number / Year of Publication	Topic	Agency
1.	Dr. S. Manikandan, Associate Professor	L-143599/2024  21822/2023- CO/L	Attainment Calculation Of Under Graduate Engineering Programme Outcomes and Programme Specific Outcomes	Intellectual Property of India
2.	Dr. S. Manikandan, Associate Professor	L-120106/2022  16906/2022- CO/L	Course Plan, Course Outcomes, Programme Outcomes and Programme Specific Outcomes Attainment Calculation of Cloud Infrastructure and Computing Course	Intellectual Property of India



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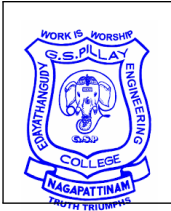
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## Department of Information Technology

### Patents (2022-2025)

S.NO	Name and Address of the applicant	Registration number / Year of Publication	Topic	Agency
1.	Dr.S. Ambika	232341044906 A <b>2023</b> Issue no: 35/2023	Development of UAV based Spectro Radio meter for Spectral data collection on minerals and vegetation	Official Journal of The Patent office
2.	Dr.S. Manikandan	6285296 Grant Date: 04-06- <b>2023</b>	IoT based garbage bin with alert system	Intellectual Property office- UK design
3.	Dr.S. Manikandan	6286027 Grant Date: 06-06- <b>2023</b>	IoT based Landslide and Flash Flood Warning Device	Intellectual Property office- UK design
4.	Dr.K.Manikandakumaran	6426370 Grant Date: 26-02- <b>2025</b>	AI BASED VOICE GUIDED BLIND STICK	Intellectual Property office- UK design



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### Quality of Publications

S.No	Publications	2024-2025	2023-2024	2022-2023
1.	SCI/SCIE	4	2	2
2.	Scopus	-	8	7
3.	IEEE/IET/Springer Conference	7	7	4
4.	Books	4	2	1
5.	Books Chapters	-	-	2
6.	Copyrights	-	1	1
7.	Patents	1	3	-