Dr.P.Eswaran
Assistant Professor

Contact

Address	:	Department of Computer Applications
		Alagappa University (Science Campus)
		Karaikudi – 630 003
		Tamil Nadu, INDIA

Employee Number	:	13412
Date of Birth	:	20.04.1977
Contact Phone (Office)	:	+91 4565 223235
Contact Phone (Mobile)	:	+91 9865022233
Contact e-mail(s)	:	eswaranperumal@gmail.com,
		eswaran@alagappauniversity.ac.in

Academic Qualifications

Course	Institution	Year	Branch	Class
Ph.D. (Regular)	Manonmaniam Sundaranar University, Dept. of Comp. Sci. & Engg., Tirunelveli.	2006 to 2010	Computer and Information Technology	Awarded
M.Tech.	Manonmaniam Sundaranar University, Centre for IT & Engg., Tirunelveli.	2003 to 2005	Computer and Information Technology	First Class with Distinction
M.Sc.	Madurai Kamaraj University, Mannar Thirumalai Naickar College, Madurai.	2001 to 2003	Computer Science and Information Technology	First Class

Teaching Experience

Total Teaching Experience   **:**   **14 Years**

Position	Institution	Duration
Assistant Professor	Alagappa University, Karaikudi.	31st May 2012 to Till Date
Assistant Professor	PSN College of Engineering and Technology, Tirunelveli	Sep. 2010 to 30th May 2012
Guest Lecturer	Centre for Information Tech. & Engg., Manonmaniam Sundaranar University, Tirunelveli.	July 2005 to November 2005

Research Experience

Total Research Experience   **:**   **18 Years**

Position	Institution / University	Duration
UGC – SRF	Manonmaniam Sundaranar University, Dept. of Computer Science & Engg.	24th April 2010 to 18.08.2010
UGC – JRF	Manonmaniam Sundaranar University, Dept. of Computer Science & Engg.	24th April 2008 to 23rd April 2010
USRF (University Stipendiary Research Fellowship)	Manonmaniam Sundaranar University, Dept. of Computer Science & Engg.	Jan. 2007 to April 2008
Research Scholar – Full Time	Manonmaniam Sundaranar University, Dept. of Computer Science & Engg.	Oct. 2006 to Dec. 2006 (Non – Stipend)

Academic and Additional Responsibilities

S. No.	Position	University Bodies	Period From	Period To
1	Deputy Director	Online Learning Programmes	03.01.2024	Till Date
2	Director	Data Management Centre	24.05.2023	Till Date
3	Nodal Officer	National Test Centre (NTA)	06.11.2019	Till Date
4	Deputy Director	Data Management Centre	17.05.2021	23.05.2023
5	Coordinator	Coaching Scheme for NET Exam	16.08.2019	18.04.2022
6	Deputy Coordinator	Cultural Club	05.09.2018	18.04.2022
7	Signe Point of Contract (SPOC) of Alagappa University	Smart India Hackathon - 2022	16.02.2022	14.04.2022
8	Coordinator (Dept. Level)	SWAYAM	11.12.2017	Till Date

Areas of Research

1. **Digital Image Processing.**
2. **Medical Data Mining and Classification.**
3. **Computer and Communication Networks.**

Patents Filed

Sl. No.	Patent number	Patent Title	Publication date	Role
1	201941041826	Design of Real Time Smart Health Care System Through Data Mining and IoT	25.10.2019	Applicant
2	201941044051	Experimental Analysis of a Solar Cooker with a Parabolic Trough Enhanced with PCM based Thermal storage	31.10.2019	Inventor
3	201931039857	IoT based Integrated Device and System for Health Analysis,	08.11.2019	Applicant

Research Supervision/Guidance

Program of Study		Completed	Ongoing
Research	**Ph.D.**	**08**	**02**
	M.Phil.	**27 (Regular)** **07 (SSP)**	**Nil**
Project	**PG**	**57**	**Nil**
	UG / Others	**05**	**Nil**

Candidates Competed Ph. D., Degree

Sl. No.	Name of the Candidate	Title of the Thesis	Discipline	Date of Award	University
1	V.Umadevi Reg. No. R20091196	Design and Analysis of Rake Receiver Algorithm for WCDMA	Computer Science (PT)	23.08.2023	Alagappa University, Karaikudi
2	A.Pramila, Reg. No. R20161783	Efficient Clinical Decision Support System for Diagnosis of Chronic Kidney Disease	Computer Science (FT)	26.8.2022	Alagappa University, Karaikudi

3	LJerlin Rubini Reg. No. R20091118	An Optimal Feature Selection and Intelligent Classification Methods for Chronic Kidney Disease Prediction	Computer Science (PT)	25.10.2021	Alagappa University, Karaikudi
4	K.Shankar Reg. No. 0935	Secret Image Sharing Schemes with Encrypted Shadow Images using Elliptic Curve Cryptography	Computer Science (FT)	17.02.2017	Alagappa University, Karaikudi
5	S.Anantha babu Reg. No. 7680	Wavelet Based Image Compression using Improved Coding Techniques	Computer & Info. Tech. Engg. (PT)	27.06.2019	M. S. University, Tirunelveli.
6	T.J.Benetict Jose, Reg. No. 7678	An Enhanced Approach for Hidden Text Detection in Digital Images	Computer Science (PT)	27.01.2017	M. S. University, Tirunelveli.
7	A.Nagalinga Rajan, Reg. No. 7679	Robust Digital Image Steganographic Schemes	Computer Science & Engg. (PT)	26.05.2016	M. S. University, Tirunelveli.
8	R.Sunder, Reg. No. 7801	Improvement of Embedding Capacity of Digital Image Steganographic Schemes	Computer & Info. Tech. Engg. (PT)	27.05.2016	M. S. University, Tirunelveli.

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
68	20	Nil	Nil	11

Cumulative Impact Factor (as per JCR) : 38.594

h-index : 22

i10 index : 36

Total Citations : 1646

Ph.D. Thesis Evaluated

Ph.D. Thesis Evaluation : 18

Ph.D. Viva Voce Examination Conducted : 14

Ongoing Research Projects

Sl. No.	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	RUSA 2.0 Phase II	2022	2024	Novel Data Classification Model for Identification of Chronic Kidney Disease	1.4
2	RUSA 2.0 Phase I	2019	2024	Novel Data Classification Model for Identification of Chronic Kidney Disease	2.5
3	Alagappa University	March 2017	March 2018	Multilevel Number Plate Recognition (MNPR)	0.35

Distinctive Achievements / Awards

1. Received **Best Paper Award** for the paper titled "Enhanced Metaheuristics with Deep Learning Model for Blockchain Assisted Cyber Security Solution in Internet of Things Environment" at the Second IEEE and ACM collaborative International Conference on Emerging trends in Information Technology and Engineering on February 22- 23, 2024 organized by School of Computer Science Engineering and Information Systems, Vellore Institute of Technology, Vellore.

2. Received **Appreciation Certificate** for outstanding academic and research excellence in acquiring the patent during the academic years 2020-2021 to 2022-2023 on 05.09.2023.

3. **Promising Researcher Award – 2022** with **Rs.3000/- Cash** from Alagappa University, Karaikudi recognition of the contribution made towards **Excellence in Research** at Alagappa University on 05.09.2022.

4. **Vallal Alagappar Research Recognition Award - 2020** from Alagappa University, Karaikudi for contribution towards the Enhancement of Research Outcome of the University in the form of **"h"** index on 12.01.2021.

5. **Received Top Cited Article Award – 2020-2021** from International Journal of Imaging Systems and Technology (Wiley).

6. **Junior and Senior Research Fellowship Award** – (JRF & SRF) **by University Grants Commission, Govt. of India, New Delhi.**

7. **USRF** (University Stipendiary Research Fellowship) **Award** by **M. S. University,** Tirunelveli for Pursuing Regular Ph.D. Degree.

8. **Best Volunteer Award – 2002** at Mannar Thirumalai Naickar College, Madurai.

9. Honoured for Secured **First Place in Taluk Level Tamil Training Contest**, Periyakulam Taluk., Theni (Dist.) in the year 1994.

10. Received the **Special Service Project** Certificate for **National Integration Special Camp Project, NSS** (From 1.10.1994 to 10.10.1994).

11. Received the **Special Service Project** Certificate for **One Day Special Service Project, NSS** (From 24.06.1995 to 25.06.1995 and 08.07.1995).

Events Organized in Leading Rolls

Number of Seminars / Conferences / Workshops / Events organized   :   06

Position	Programme	Duration	Institution
Organizing Secretary	Internal Hackathon for Smart India Hackathon – 2022	12th April 2022	Alagappa University
Organizing Secretary	DST – PURSE Sponsored Two Day National Seminar on "Recent Research Trends and Developments in Computer Science"	8th & 9th March 2018	Alagappa University
Coordinator	International Conference on "Innovations in Computer Science & Technology"	4th & 5th April 2016	Alagappa University
Coordinator	One day national level seminar on "Career Opportunities in SMAC and IoT"	31st March 2015.	Alagappa University
Co-organizing Secretary	35th South Zone Inter University Youth Festival – 2019 in Collaboration with Association of Indian Universities (AIU), New Delhi	18th to 22nd December 2019	Alagappa University
Event Coordinator	ALUTES 2016	October 3 – 5, 2016	Cultural Club, Alagappa University

Events Participated

Conferences / Seminars / Workshops: 38

1. Conference:
    i. International – 20
    ii. National – 5
2. Seminar:
    i. National – 5
3. Workshop:
    i. International – 3
    ii. National – 5

Professional Bodies

1. Member – International Association of Computer Science and Information Technology (IACSIT), Singapore (Member No.: 80332865).

2. Member, International Association Engineers (IAENG), Hong Kong.
   (Member No.: 187224)

Editorial Board

1. Co-Editor, International Conference on Innovations in Computer Science and Technology Organized by the Department of Computer Science and Engineering, Alagappa University, Karaikudi, Tamil Nadu on 4th & 5th April 2016.

Advisory Board

Year/Period	Name of the BoS / Administrative Committee / Academic Committee	Role
2023 Onwards	BCA Degree Board of Studies of Alagappa University, Karaikudi.	Chairman
2023 Onwards	PGDCA Theory Paper Evaluation Board	Chairman
2013 Onwards	MCA Degree Board of Studies of Alagappa University, Karaikudi.	Member
2023 Onwards	M.Sc. (AI & DS) Degree Board of Studies of Alagappa University, Karaikudi.	Member
2022 Onwards	B.Sc., Artificial Intelligence & Machine Learning Board of Studies of Alagappa University, Karaikudi.	Member
2017 Onwards	BCA Degree Board of Studies of Alagappa University, Karaikudi.	Member
2019 - 2022	B.Sc. (Computer Science) Board of Studies of Directorate of Distance Education, Alagappa University, Karaikudi.	Member
2013 Onwards	Doctoral Committee (Ph.D. Registration and Progress Monitoring Committee)	Member

Academic Bodies in Other Institutes / Universities

Year/Period	Name of the BoS / Administrative Committee / Academic Committee	Role
2021 Onwards	M.E. Computer Science and Engineering Board of Studies of Manonmaniam Sundaranar University, Tirunelveli	Member
2020 Onwards	M.C.A. Board of Studies of Manonmaniam	Member

	Sundaranar University, Tirunelveli	
2020 Onwards	B.Sc. & M.Sc. (IT/ IT & System Management / Networking & Information Technology / IT & E Commerce Board of Studies of Manonmaniam Sundaranar University, Tirunelveli	Member
2019 Onwards	B.Voc. Software Development Board of Studies of Mannar Thirumalai Naickar College, Madurai.	Subject Expert
2019 Onwards	B.Sc. (IT) Board of Studies of Mannar Thirumalai Naickar College, Madurai.	Subject Expert
2019 Onwards	Academic Audit for the Department of Information Technology	Subject Expert
July 2018 – July 2021	B.Sc., (Comp. Sci.) & (Info. Tech.) Board of Studies of Bharathidasan University, Tiruchurappalli	Member
2013 Onwards	Board of Studies in PSN College of Engineering & Technology, Tirunelveli	Member
2019 Onwards	B.Sc. & M.Sc. (Comp. Sci.) Board of Studies of J. J. College of Arts and Science, Pudukkottai	Member
August 2018 to August 2021	MCA Board of Studies of Nehru Memorial College, Puthanampatti, Triucirappalli	Member (Subject Expert)
2020 Onwards	PGDCA Board of Studies of Fatima College, Madurai	Subject Expert
2014 Onwards	Academic Audit for Department of Computer Applications (MCA)	Subject Expert
February 2022 Three Years	Board of Studies in Yadava College, Madurai.	Member
2012 Onwards	B.E. & M.E. Computer Science and Engineering Board of Studies of PSN College of Engineering & Technology, Tirunelveli	Member

Others
1. Member, Doctoral Committee in Anna University, Chennai.
2. Member, Doctoral Committee in Manonmaniam Sundaranar University, Tirunelveli.
3. Member, Doctoral Committee in Sathyabhama University, Chennai.
4. Member, Doctoral Committee, Noorul Islam University, Nagercoil.
5. Member, Doctoral Committee in VIT University, Vellore.

Ph.D. Thesis Evaluated

Ph.D. Thesis Evaluation   18

Ph.D. Viva Voce Examination Conducted   14

Sl. No.	Name Scholar	Title of the Thesis	Year of Completion
1	S.N.Sithi Shamila	Video retrieval using fisher vector and deep	2023

		learning neural networks	
2	V.Radha Mani Reg. No.:11738/B2/2017	A Novel Approach for Load Balancing in Cloud Computing Environment using RL-OPT-IRIAL	2022
3	B. Baron Sam Reg. No. 2015191101	Medical Image Restoration in MR/CT Images of Human Abdomen	2021
4	V.Poornachander Reg. No: 9007-17-893-008	Scalable, Opportunistic, Energy Efficient Routing (SOEER) - A Novel Clustering Approach	2023
5	R.Soundhara Raja Pandian Reg. No. 14144389772	Network Optimization and Security Enhancement for cloud based E-Learning Platforms	2023
6	Shanid Malayil Reg. No. 1117908221	Amalgamation of Optimization Algorithms with Driven Deep Learning for Severity Level Classification of Lung Cancer and Survival Timeline Prediction of Lung Cancer.	2023
7	V.Umadevi Reg. No. R20091196	Design and Analysis of Rake Receiver Algorithm for WCDMA	2023
8	A.Pramila Reg. No. R20161783	Efficient Clinical Decision Support System for Diagnosis of Chronic Kidney Disease	2022
9	L. JerlinRubini Reg. No.: R20091118	An Optimal Feature Selection and Intelligent Classification Methods for Chronic Kidney Disease Prediction	2021
10	J.C.Smitha Reg. No. 1111908204	Investigations on Pathological Tissue Segmentation and Classification of MRI Brain Images using Artificial Neural Networks.	2020
11	A.A.Haseena Thasneem Reg. No. 11593	Virtual Reality and 3D Reconstruction from 2D Medical Images.	2020
12	M.Milton Joe Reg. No. 110319	Modelling a Novel Web VANET Architecture and Enhancing Security Algorithms through Social Network	2018
13	K.Elampari Reg. No. 10600	A Study of Random Numbers Generated by A Q Protocol and some True Random Numb Generators.	2018
14	L.Godlin Atlas Reg. no. 11724	Detection of Retinal Haemorrhages in Fundus Images using ANFIS Classifiers and Various Segmentation Techniques	2018
15	M.V.Ashok Reg. No. 3601	Advertising Scheduling using Educational Data Mining.	2017
16	K.Shankar Reg. No. 0935	Secret Image Sharing Schemes with Encrypted Shadow Images using Elliptic Curve Cryptography.	2017
17	R.Rajalakshmi Reg. No.0110907202	A Pose and Illumination Variation Using Efficient Discriminant Component Analysis with Multi -Class Support Vector Machine in Face Recognition System	2016
18	V.Prema Reg. No.11JLDRCS018	Image Analysis and Processing Using Mathematical Morphological Operators and High Frequency Filter For Pipeline Crack Measurements.	2015

19	M.Edwin Jayasingh Reg. No. 6062	Content Based Image Retrieval of Cervical Cytology Images for Computer Aided Diagnosis.	2013
20	R.Gandhiraja Reg. No. 10110239	Quality of Service Enhanced Mobile Adhoc Networks	2012

Data Set Collected and Published

1. Jerlin RL, Eswaran P, Soundarapandian P (2015) UCI Chronic Kidney Disease dataset. School of Information and Computer Sciences. University of California Irvine. CA. USA. https://archive. Ics.uci.edu/ml/datasets/Chronic_Kidney_Disease.

List of Research Articles / Recent Publications

Publication in International Journal

S. No.	Authors/Title of the paper / Journal	Impact Factor
1	E. Yang, K. Shankar, **Eswaran Perumal** and C. Seo, "Optimal Fuzzy Logic Enabled EEG Motor Imagery Classification for Brain Computer Interface", in IEEE Access, vol. 12, pp. 46002-46011, 2024, **DOI:** 10.1109/ACCESS.2023.3346674	**3.9**
2	Jerlin Rubini, **Eswaran Perumal,** "Oppositional firefly optimization based optimal feature selection in chronic kidney disease classification using deep neural network", Journal of Ambient Intelligent and Humanized Computing, 13:1799–1810, 2022. **(SCI Indexed)** https://doi.org/10.1007/s12652-021-03477-2	**7.104**
3	K. Shankar, **Eswaran Perumal**, Mohamed Elhoseny, et al., "Synergic Deep Learning for Smart Health Diagnosis of COVID-19 for Connected Living and Smart Cities" ACM Transactions on Internet Technology (TOIT), Volume 22, Issue 3, August 2022, Article No.: 61, pp 1–14 **(SCI Indexed)** https://doi.org/10.1145/3453168	**3.135**
4	K.Shankar, **Eswaran Perumal**, Tiwari, P. et al. "Deep learning and evolutionary intelligence with fusion-based feature extraction for detection of COVID-19 from chest X-ray images", Multimedia Systems, 28:1175–1187, 2022. **(SCI Indexed)** https://doi.org/10.1007/s00530-021-00800-x	**1.935**
	K. Shankar, **Eswaran Perumal**, V.G. Díaz et al., "An optimal cascaded	**6.725**

5	recurrent neural network for intelligent COVID-19 detection using Chest X-ray images", Applied Soft Computing (2021), **(SCI Indexed)** https://doi.org/10.1016/j.asoc.2021.107878.	
6	K. Shankar, **Eswaran Perumal,** "Ant Colony Optimization based Optimal Steganography Technique for Secret Image Sharing Scheme", Advances in Mathematics: Scientific Journal, vol. 10, no.1, pp. 453–461, January 2021, **(Scopus Indexed)** https://doi.org/10.37418/amsj.10.1.45	**Scopus Indexed**
7	Shankar, K. and **Eswaran Perumal,** "Automated Detection and Classification of COVID-19 from Chest X-ray Images using Deep Learning", Journal of Computational and Theoretical Nano Science, vol. 17, no. 12, pp. 5457-5463 (7), December 2020. **(Scopus Indexed)** https://doi.org/10.1166/jctn.2020.9439	**0.220**
8	E.Laxmi Lydia, G. Jose Moses, Vijayakumar Varadarajan, Fredi Nonyelu, Andino Maseleno, **Eswaran Perumal,** K. Shankar, "Clustering and Indexing of Multiple Documents using Feature Extraction Through Apache Hadoop on Big Data", Malaysian Journal of Computer Science, Issue 1, pp., 108-123, November 2020. **(SCI Indexed)** https://doi.org/10.22452/mjcs.sp2020no1.8	**1.043**
9	K. Shankar, **Eswaran Perumal,** Mohamed Elhoseny and Phong Thanh Nguyen, "An IoT-Cloud Based Intelligent Computer-Aided Diagnosis of Diabetic Retinopathy Stage Classification Using Deep Learning Approach", Computers, Materials & Continua, vol.66, no.2, pp.1665-1680, November 2020. **(SCI Indexed)**. Doi:10.32604/cmc.2020.013251	**4.89**
10	Shankar, K., **Eswaran Perumal,** "A novel hand-crafted with deep learning features based fusion model for COVID-19 diagnosis and classification using chest X-ray images", Complex & Intelligent System, No.7, pp. 1277–1293, November 2020. **(SCI Indexed – IF: 3.791)** https://doi.org/10.1007/s40747-020-00216-6	**3.791**
11	Jerlin Rubini Lambert and **Eswaran Perumal,** "Hybrid Kernel Support Vector Machine Classifier and Grey Wolf Optimization Algorithm Based Intelligent Classification Algorithm for Chronic Kidney Disease", Journal of Medical Imaging and Health Informatics, vol. 10, no. 10, pp. 2297-2307, October 2020. **(SCI Indexed)** https://doi.org/10.1166/jmihi.2020.3177	**0.642**
	Joshi, G.P.; **Eswaran Perumal.**; Shankar, K.; Tariq, U.; Ahmad, T.;	**2.412**

12	Ibrahim, A., "Toward Blockchain-Enabled Privacy-Preserving Data Transmission in Cluster-Based Vehicular Networks", Electronics (August) 2020, 9, 1358. **(SCI Indexed)** **https://doi.org/10.3390/electronics9091358**	
13	Pramila Arulanthu and **Eswaran Perumal,** "An intelligent IoT with cloud centric medical decision support system for chronic kidney disease prediction", International Journal of Imaging Systems and Technology, March 2020; 1-13. **(SCI Indexed)**. **https://doi.org/10.1002/ima.22424**	**1.952**
14	Jerlin Rubini Lambert and **Eswaran Perumal**, "Efficient Classification and Prediction of Chronic Kidney Disease by using Multi-Kernel Support Vector Machine and Fruit Fly Optimization Algorithm", International Journal of Imaging Systems and Technology, January 2020; 1-14. **(SCI Indexed – IF: 1.952)** **https://doi.org/10.1002/ima.22406**	**1.952**
15	Pramila Arulanthu, **Eswaran Perumal,** "An Efficient Oppositional Crow Search Optimization-based Deep Neural Network Classifier for Chronic Kidney Disease Identification", International Journal of Innovative Computing and Applications, vol. 12, no. 4, pp. 206-215, June 2021 **(Scopus Indexed)** **DOI**: 10.1504/IJICA.2021.116671	**Scopus Indexed**
16	Jerlin Rubini Lambert and **Eswaran Perumal,** "Optimal Feature Selection Methods for Chronic Kidney Disease Classification using Intelligent Optimization Algorithms", Recent Advances in Computer Science and Communications (August 2020) 13: 1, **(Scopus Indexed)**. https://doi.org/10.2174/2666255813999200818131835	**Scopus Indexed**
17	K.Shankar, **Eswaran Perumal,** Vidhyavathi,R.M, "Deep neural network with moth search optimization algorithm based detection and classification of diabetic retinopathy images", SN Appl. Sci. 2:748, (March 2020), **(ESCI - WoS).** https://doi.org/10.1007/s42452-020-2568-8	**ESCI**
18	Pramila Arulanthu and **Eswaran Perumal,** "Risk Factor Identification, Classification and Prediction Summary of Chronic Kidney Disease", Recent Advances in Computer Science and Communications, January 2020, 13: 1. ISSN: Online: 2666-2566. **(Scopus Indexed)** https://doi.org/10.2174/2666255813666200101100424	**Scopus Indexed**
19	K.Shankar and **P.Eswaran,** "RGB Based Multiple Share Creation in Visual Cryptography with Aid of Elliptic Curve Cryptography", IEEE Journal of	**0.344**

	China Communications, Vol. 14, Issue 2, page(s): 118–130, February 2017. **(SCI Indexed – IF: 0.344)**. **DOI:**10.1109/CC.2017.7868160	
20	K.Shankar and **P.Eswaran,** "RGB Based Secure Share Creation in Visual Cryptography Using Optimal Elliptic Curve Cryptography Technique", Journal of Circuits, Systems, and Computers, (World Scientific) Vol. 25, No. 11, November 2016. **(SCI Indexed).** https://doi.org/10.1142/S0218126616501383	**0.250**
21	S. Anantha Babu, **P. Eswaran** and C. Senthil Kumar, "Lossless Compression Algorithm Using Improved RLC for Grayscale Image", Arabian Journal of Science and Engineering, Vol.41, page(s): 3061–3070, March 2016. **(SCI Indexed)** https://doi.org/10.1007/s13369-016-2082-x	**0.728**
22	Ambika, I. Sadasivam, V and **Eswaran, P.** "An Effective Queuing Architecture for Elastic and Inelastic Traffic with Different Dropping Precedence in MANET", EURASIP Journal on Wireless Communications and Networking, vol.155, 2014. **(SCI Indexed).** https://doi.org/10.1186/1687-1499-2014-155	**0.627**
23	**Eswaran Perumal** et al., "Hi–Tech Authentication for Palette Images Using Digital Signature and Data Hiding", International Arab Journal of Information Technology, Vol. 8, no. 2, page(s): 117–123, April 2011. **(SCI Indexed).**	**0.344**
24	S.Poonkuntran, R.S.Rajesh and **P.Eswaran,** "Energy aware Fuzzy Color Segmentation Algorithm–An application to criminal identification using mobile devices", International Journal of Wavelets and Multi resolution Information Processing Systems (IJWMIP), vol. 6, no. 5, page(s): 707–718, 2008. **(SCI Indexed).** https://doi.org/10.1142/S0219691308002604	**0.500**

Publications – International Conference

1. Saravana Prabhu R., Prema A., **Eswaran Perumal,** "A Novel Cloud Security Enhancement Scheme to Defend against DDoS Attacks by using Deep Learning Strategy", Proceedings of 6th International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022), pp. 679-686, December 2022, **IEEE Conference Record** ISBN: 978-16654-8271-4, **(Scopus Indexed). DOI:** 10.1109/ICECA55336.2022.10009177

2. Jerlin Rubini Lambert; Pramila Arulanthu; **Eswaran Perumal**, "Identification of Nominal Attributes for Intelligent Classification of Chronic Kidney Disease using Optimization Algorithm", International Conference on Communication and Signal Processing (ICCSP), July 2020, pp. 0119-0125, **IEEE Conference Record**, ISBN: 978-1-7281-4988-2, **(Scopus Indexed**) **DOI:10.1109/ICCSP48568.2020.9182206**

3. Pramila Arulanthu and **Eswaran Perumal,** "Predicting the Chronic Kidney Disease using Various Classifiers", 4th IEEE International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques, pp. 70-75, December 2019, **IEEE Conference Record,** ISBN: 978-1-7281-3261-7, **(Scopus Indexed)** https://doi:10.1109/ICEECCOT46775.2019.9114653

4. Anantha Babu, S and **Eswaran Perumal**, "Efficient Approach of Run Length Coding Technique using Lossless Grayscale Image Compression (E-RLC)", 3rd International Conference on Inventive Computation Technologies (ICICT), page(s): 534-539, November 2018, **IEEE Conference Record,** ISBN: 978-1-5386-4985-5, **(Scopus Indexed)** DOI:10.1109/ICICT43934.2018.9034377

5. **Eswaran Perumal** and Pramila Arulanthu, "Multilevel Morphological Fuzzy Edge detection for Color Images (MMFED)", IEEE International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques", pp. 269–273, December 2017. **IEEE Conference Record,** ISBN: 978-1-5386-2361-9, **(Scopus Indexed)** DOI: 10.1109/ICEECCOT.2017.8284680

6. K.Shankar and **P.Eswaran,** "A New k out of n Secret Image Sharing Scheme in Visual Cryptography", Proceedings of the 10th International Conference on Intelligent Systems and Control (ISCO 2016), page(s): 369-374, January 2016. **IEEE Conference Record, Scopus Indexed,** ISBN: 978-1-4673-7807-9. DOI: 10.1109/ISCO.2016.7726969

7. K.Shankar and **P.Eswaran,** "Sharing a Secret Image with Encapsulated Shares in Visual Cryptography", Procedia Computer Science, Elsevier, Vol. 70, pp. 462-468, 2015. https://doi.org/10.1016/j.procs.2015.10.080

8. **Eswaran Perumal** et al., "Fuzzy – PL Transformation based Color Edge Detection" Proceedings of the 16th International Conference on Advanced Computing and

Communication (ADCOM 2008), page(s): 9–12, December 2008, **(Indexed by IEEE).** ISBN: 978-1-4244-2963-9, **(Scopus Indexed),** DOI: 10.1109/ADCOM.2008.4760420

9. S.Poonkuntran, R.S.Rajesh, **Eswaran Perumal,** "A Reversible Watermarking with Low Warping: An Application to Digital Fundus Image", Proceedings of the IEEE International Conference on Computer and Communication Engineering (ICCCE '08), page(s): 472–477, May 2008, **IEEE Conference Record,** ISBN: 978-1-4244-1691-2, **(Scopus Indexed),** DOI:10.1109/ICCCE.2008.4580649

PUBLICATION – BOOK

1. K.Shankar, **Eswaran Perumal**, Deepak Gupta, "Artificial Intelligence for the Internet of Health Things**",** CRC Press, Taylor and Francis Group, May 2021.
   ISBN: 978-0-367-74497-7, https://www.routledge.com/Artificial-Intelligence-for-the-Internet-of-Health-Things/Shankar-Perumal-Gupta/p/book/9780367744977

2. Eswaran Perumal, "Advanced Data Base Management System", Ist Edition, Chandru Publishers, 2020, ISBN: 978-81-945191-02.

3. M.Sarulatha & P.Eswaran, "Machine Learning Algorithms and Tools", Ist Edition, Ryan Publishers, 2023, ISBN: 978-81-19587-73-5.

PUBLICATIONS – Book Chapters

1. V.Umadevi & P.Eswaran, "Revolutionizing Agriculture: The Integration of IoT in Smart Farming", Convergence of Business and Technology, pp. 305-317, Beyond Line Publisher, December 2023, ISBN: 978-93-95659-55-0.
   https://play.google.com/books/reader?id=LbLoEAAAQBAJ&pg=GBS.PA10&hl=en

2. Denis A. Pustokhin, Irina V. Pustokhina, Eswaran Perumal, K. Shankar, "Intelligent Robots in the Disease Recovery Process using a Whale Optimization-Based Feature Selection and Classification Model", Robotic Technologies in Biomedical and Healthcare Engineering, June 2021, (**Taylor & Francis – Scopus Indexed**) ISBN: 9781003112273, DOI https://doi.org/10.1201/9781003112273

3. Andino Maseleno, Wahidah Hashim, Eswaran Perumal, M. Ilayaraja, and K. Shankar, "Access control and classifier-based blockchain technology in e-healthcare applications", Intelligent Data Security Solutions for e-Health Applications, pp. 151-167, August 2020, (**Elsevier – Scopus Indexed**), ISBN: 978-0-12-819511-6, https://doi.org/10.1016/B978-0-12-819511-6.00008-X

4. K. Shankar, Mohamed Elhoseny, Eswaran Perumal, M. Ilayaraja, K. Sathesh Kumar, "An Efficient Image Encryption Scheme based on Signcryption Technique with Adaptive Elephant Herding Optimization", Cyber security and Secure Information Systems, Advanced Sciences and Technologies for Security Applications, pp. 31-42, June 2019, (**Springer – Scopus Indexed**), ISBN: 978-3-030-16837-7,

https://doi.org/10.1007/978-3-030-16837-7_3

5. P. Manickam, K. Shankar, Eswaran Perumal, M. Ilayaraja, K. Sathesh Kumar., "Secure Data Transmission Through Reliable Vehicles in VANET using Optimal Lightweight Cryptography", Cybersecurity and Secure Information Systems, Advanced Sciences and Technologies for Security Applications, pp. 193-204, June 2019. (**Springer – Scopus Indexed),** ISBN: 978-3-030-16837-7, https://doi.org/10.1007/978-3-030-16837-7_9

6. K.Shankar, M.Ilayaraja, K. Sathesh Kumar, Eswaran Perumal, "Mobility and QoS Analysis in VANET using NMP with Salp Optimization Models", Emerging Technologies for Connected Internet of Vehicles and Intelligent Transportation System Networks. Studies in Systems, Decision and Control, vol. 242, pp. 15 -26, July 2019, (**Springer – Scopus Indexed)** ISBN: 978-3-030-22773-9,

https://doi.org/10.1007/978-3-030-22773-9_2

7. Karthika Velu, Pramila Arulanthu, Eswaran Perumal, "Energy Reduction Stratagem in Smart Homes using Association Rule Mining", Innovative Data Communication Technologies and Application, Lecture Notes on Data Engineering and Communications Technologies, vol. 46. pp. 188-193, January 2020, (**Springer – Scopus Indexed),** ISBN: 978-3-030-38040-3, https://doi.org/10.1007/978-3-030-38040-3_22

8. K.Shankar, Eswaran Perumal., "An Efficient Image Encryption Technique based on Optimized Key Generation in ECC using Genetic Algorithm", Artificial Intelligence and Evolutionary Computations in Engineering Systems. Advances in Intelligent Systems and Computing, vol. 394, pp. 705-714, February 2016, (**Springer – Scopus Indexed),** ISBN: 978-81-322-2656-7, https://doi.org/10.1007/978-81-322-2656-7_64

Resource Person in Various Capacities

Guest Lecture/ Invited Talk/ Special Lecture Presented: 12

1. Delivered **Lecture "Information Technology Development for Smart Environment"** for the UGC Sponsored Faculty Induction Programme, batch XVI conducted by the **UGC –**

Human Resource Development Centre, University of Madras for the University and College Teachers on **17.02.2024**.

2. Presented a **Guest Lecture** on **"Development of Research Tools"** in National Level Workshop organized by the **Dept. of Education (DDE), Alagappa University,** Karaikudi on **30th & 31st August 2016**.

3. Delivered an **Invited Talk** on **"Recent Trends and Developments in Communication"** in Intercollegiate Meet (Mirror 17) organized by **PG Research Dept. of Computer Science, Erode Arts & Science College,** Erode on **09.09.2017**.

4. Delivered an **Invited Talk** on **"Recent Trends in Information Technology"** in Technical Symposium organized by **Sri Raaja Rajan College of Engineering and Technology**, Karaikudi on **08.08.2019**.

5. Delivered an **Invited Talk** on **"Video Image Processing"** in National Level Technical Symposium organised by **Dept. of Software Engineering, Noorul Islam University**, Nagercoil on **21.10.2019**.

6. Presented a **Special Lecture** on **"Modern Communication Technology and its Developments using IoT"** in Webinar Lecture Series organized by the **Dept. of Computer Applications, Alagappa University**, Karaikudi on **29.05.2020**.

7. Presented a **Guest Lecture** on "**Modern Technology Integration for Smart Environment"** organized by the **Dept. of Computer Applications, Excel College for Commerce and Science,** Komarapalayam, Namakkal on **21.11.2020**.

8. Delivered a **Talk** in the Webinar on **"Opportunities and Challenges in IoT"** Organised by the **Department of Computer Science, J.J. College of Arts and Science**, Pudukkottai on **16.07.2021**.

9. Delivered the **Lecture** on the topic **"The Development of Social Media and its Impact in Society"** during the **Seven-Day NSS Special Camp** organized by the **National Service Scheme, Alagappa University**, Karaikudi on **01.04.2022**.

Interdisciplinary Lecture Presented

1. Presented an **Interdisciplinary Special Lecture** on **"Youth Welfare and Role of the Society"** in NSS Special Camp organized by the **National Service Scheme, Alagappa University**, Karaikudi on **23.03.2019**.

Resource Person

1. Performed as a **Resource Person** for the **UGC-Sponsored Online Refresher Course in Computer Science & Applications** conducted by the **UGC-HRDC, Bharathidasan University,** Tiruchirappalli on **28.09.2021 (Forenoon Session)**.

2. Performed as a **Keynote Speaker** in the **International Conference on Innovation in Interdisciplinary Research 2020** organized by the **Kalasalingam Academy of Research & Education** during **23-24 June 2020.**

Signature
Name: Dr.P.Eswaran
Designation: Assistant Professor