

Dr.P.Eswaran Assistant Professor

Contact

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Academic Qualifications: M.Sc., M.Tech., Ph.D.

Teaching Experience: 7 Years

Research Experience: 10 Years

Additional Responsibilities

- 1. Programme Officer SWACHH BHARAT & SWASTH BHARAT
- 2. Coordinator MCA Programme

Areas of Research

- 1. Digital Image Processing,
- 2. Data Mining,
- 3. Computer and Communication Networks

Research Supervision / Guidance

| Program of Study | | Completed | Ongoing |
|------------------|-------------|-----------|---------|
| Research | Ph.D. | 02 | 05 |
| | M.Phil. | 17 | 04 |
| Project | PG | 35 | 08 |
| | UG / Others | 05 | - |

Publications

| International | | National | | Others |
|---------------|-------------|----------|-------------|--------------|
| Journals | Conferences | Journals | Conferences | Books / |
| | | | | Chapters / |
| | | | | Monographs / |
| | | | | Manuals |
| 30 | 16 | | | 03 |

Cumulative Impact Factor (as per JCR) : 0.40 h-index : 3 i10 index : -Total Citations : 28

Distinctive Achievements / Awards

- 1. Had University Grants Commission Junior Research Fellowship Award
- 2. Had USRF (University Stipendiary Research Fellowship) Award
- 3. Received Best Volunteer Award 2002 at Mannar Thirumalai Naickar College, Madurai.
- 4. Honoured for Secured First Place in Taluk Level Tamil Training Contest, Periyakulam Taluk.1994.
- 5. Received the Special Service Project Certificate for National Integration Special Camp Project, NSS (From 1.10.1994 to 10.10.1994).
- 6. 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 roles

Number of Seminars / Conferences / Workshops / Events organized: 04

1. **Convener** – organized one day seminar on "Advances in Digital Image Processing" in Department of Computer Science and Engineering, PSN College of Engineering and Technology Tirunelveli on 02.11.2010.

- 2. **Convener** organized one day national level seminar on "Advances in Digital Image Processing and Mobile Computing" in Department of Computer Science and Engineering, PSN College of Engineering and Technology Tirunelveli on 19th February 2011.
- 3. **Coordinator** organized one day national level seminar on "Career Opportunities in SMAC and IoT" in the Department of Computer Science and Engineering, Alagappa University, Karaikudi in association with ICT Academy of Tamil Nadu on 31st March 2015.
- 4. **Coordinator** organized International Conference on "Innovations in Computer Science & Technology" in the Department of Computer Science and Engineering, Alagappa University, Karaikudi, Tamil Nadu on 4th & 5th April 2016.
- 5. **Event Coordinator** ALUTES 2016 organized by the Cultural Club, Alagappa University during October 3 5, 2016.

Events Participated

Conferences / Seminars / Workshops: 23

- 1. Conference:
 - i. International 10
 - ii. National 5
- 2. Seminar:
 - i. National 5
- 3. Workshop:
 - i. International 1
 - ii. National 2

Other Training Programs

- 1. Participated in UGC Sponsored **Orientation Programme** at Academic Staff College, Madurai Kamaraj University from 17.12.2014 to 13.01.2015.
- 2. Participated in five days **Faculty Development Programme** on Cloud Infrastructure and Services Conducted by ICT Academy of Tamil Nadu From23.02.2015 to 27.02.2015 at Alagappa University, Karaikudi.
- 3. Participated in **Orientation Programme** organized by Curriculum Development Cell, Alagappa University from 24.08.2012 to 31.08.

Membership in

Professional Bodies

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

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.

Academic Bodies (such as Board of Studies etc.,)

- 1. Member Board of Studies in PSN College of Engineering & Technology, Tirunelveli.
- 2. Member Board of Studies in Alagappa University, Karaikudi. DDE B.Sc. Computer Science.

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.
- 6. Member, Syllabus auditing committee in V.V.Vanniaperumal Women's College, Virudhunagar.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 02

Others

- 1. No. of PhD Thesis evaluated: 06
- 2. No. of PhD Public Viva Voce Examination conducted: 03

Recent Publications

- 1. K. Shankar and P.Eswaran, (2016), "RGB Based Secure Share Creation in Visual Cryptography Using Optimal Elliptic Curve Cryptography Technique", Journal of Circuits, Systems, and Computers, Vol. 25, Issue 11, Page(s). 1–23. (SCI Indexed Impact Factor: 0.250).
- 2. S. Anantha Babu, P. Eswaran and C. Senthil Kumar, (2016), "Lossless Compression Algorithm Using Improved RLC for Grayscale Image", Arabian Journal of Science and Engineering, Vol. 41, Issue 8, page(s): 3061–3070. (SCI Indexed Impact Factor: 0.728).
- 3. Ambika, I. Sadasivam, V and Eswaran, P. (2014), "An Effective Queuing Architecture for Elastic and Inelastic Traffic with Different Dropping Precedence in MANET", EURASIP Journal on Wireless Communications and Networking, Springer, Vol. 2014:155, Issue 1. (SCI Indexed Impact Factor: 0.627).

- 4. K.Shankar and P.Eswaran, "RGB Based Multiple Share Creation in Visual Cryptography with Aid of Elliptic Curve Cryptography", accepted in China Communications, IEEE Explore digital library, China. (SCI Indexed Impact Factor: 0.344).
- 5. Eswaran Perumal *et al.*, (2011), "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. (SCI Indexed Impact Factor: 0.344).
- 6. Shanmugam Poonkuntran, R. S. Rajesh and P. Eswaran, (2008), "New 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. (SCI Indexed Impact Factor: 0.500).
- 7. Eswaran Perumal et al., (2010), "Reversible Imperceptible Semi Fragile Watermarking Scheme for Digital Fundus Image Authentication", International Journal of Signal and Imaging Systems Engineering, vol. 3, no. 2, page(s): 116–125. (Scopus Indexed Impact Factor: 0.12).
- 8. K.Shankar and P.Eswaran, (2015), "A Secure Visual Secret Share (VSS) Creation Scheme in Visual Cryptography using Elliptic Curve Cryptography with Optimization Technique", Australian Journal of Basic and Applied Sciences, Vol.9, issue36, page(s): 150-163. (Scopus Indexed Impact Factor: 0.786).
- 9. K.Shankar and P.Eswaran, (2015), "ECC Based Image Encryption Scheme with aid of Optimization Technique using Differential Evolution Algorithm", International Journal of Applied Engineering Research, Vol.10, No.5, pp. 1841–184. (Scopus Indexed -- Listed Impact Factor: 0.14)
- 10. R.Sunder and P.Eswaran, (2015), "A Novel Steganographic Method Based On Vector Quantization of Integer Lifting Wavelet Coefficients", International Journal of Applied Engineering Research, Volume 10, Number 2 pp. 2919-2932. (Scopus Indexed -- Listed Impact Factor: 0.14).
- 11. T. J. Benedict Jose, P. Eswaran, (2015), "Block Based Steganalysis with Contourlet and ELM", International Journal of Applied Engineering Research, Volume 10, Number 3, pp. 7385-7400. (Scopus Indexed Listed Impact Factor: 0.14).
- 12. A.Nagalinga Rajan and P.Eswaran, (2015), "High Capacity Robust Image Steganography in the DCT Domain Using Spread Spectrum Technique", International Journal of Applied Engineering Research, Vol. 10, No. 6, pp. 14489–14496.(Scopus Indexed -- Listed Impact Factor: 0.14).
- 13. A.Nagalinga Rajan, P.Eswaran, (2015), "Noise Resistant Image Steganography using Iterated Truncated Mean Modulation in the Spatial Domain", International Journal of Applied Engineering Research, Vol. 10, No. 2, pp. 4957–4972. (Scopus Indexed Listed Impact Factor: 0.14).
- 14. T. J. Benedict Jose, P. Eswaran, (2014) "An Efficient Steganalytic Algorithm based on Contourlet with GLCM", Research Journal of Applied Sciences, Engineering and Technology, Vol. 8, No.12, page(s): 1396-1403. (Scopus Indexed -- Listed Impact Factor: 0.15).
- 15. K.Shankar and P.Eswaran, (2016), "An Efficient Image Encryption Technique Based on Optimized Key Generation in ECC Using Genetic Algorithm", Advances in Intelligent Systems and Computing, Springer, Vol. 394, page(s): 705-714.
- 16. K.Shankar and P.Eswaran, (2015), "Sharing a Secret Image with Encapsulated Shares in Visual Cryptography", Procedia Computer Science, Elsevier, Vol.70, page(s): 462-468.

- 17. K.Shankar and P.Eswaran, (2016), "Performance Evaluation of Secure Share Creation Schemes in Visual Cryptography", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) Vol. 3, Special Issue 20, page(s): 189-194.
- 18. K.Shankar and P.Eswaran, (2016), "A New k out of n Secret Image Sharing Scheme in Visual Cryptography", 2016 10th International Conference on Intelligent Systems and Control (ISCO), IEEE, page(s): 1–6.
- 19. S. Anantha Babu, P. Eswaran and C. Senthil Kumar, (2016), "Lossless Grayscale Image Compression using Block-wise Entropy Shannon (LBES)", International Journal of Computer Applications (0975–8887), Vol. 146, No.3, pp. 01-06.
- 20. S. Anantha Babu, P. Eswaran and C. Senthil Kumar, (2016), "Lossless Compression Algorithm using Advanced Quantization Technique for Color Images", Advances in Natural and Applied Sciences (1995–0772), Volume 10, No.13, page(s): 101-111.
- 21. A.Nagalinga Rajan, P.Eswaran and R.Sunder, (2015), "A Novel Spread Spectrum Image Steganography Technique with Low Bit Error Rate", International Journal of Advance Research in Science and Engineering, Vol. No.4, Issue 05, pp. 333–346.
- 22. A.Nagalinga Rajan, P.Eswaran, R.Sunder and S.Poonkuntran, (2013), "Block Mean Modulation: An Effective and Robust Image Steganographic Technique in the Spatial Domain", International Journal of Computer Applications, Vol. 73, Issue No. 19, page(s): 14–20.
- 23. R.Sunder, P.Eswaran and A.Nagalinga Rajan, (2015), "High Capacity Image Steganography in the Spatial Domain Using Lehmer Code", International Journal of Advance Research in Science and Engineering, Vol. No.4, Issue 05, pp. 91-99.
- 24. R.Sunder, P.Eswaran, A.Nagalinga Rajan and S.Poonkuntran, (2013), "High Capacity Data Embedding in Images by Pixel Triplets Matching", International Journal of Computer Applications, Vol. 73, Issue No. 13, pp. 38-43.
- 25. Santhanakumar,M and Eswaran,P (2013), "Web Content Mining-Survey", International Journal of Research in Engineering & Advanced Technology, Vol. 1, Issue 5.
- 26. Benedict Jose, T. J. and Eswaran, P., (2013), "Effective Steganalytic Algorithm based on Residual Value of Pixels in an Image", International Journal of Advanced Computer Research, Volume-3, Number-3, Issue-12, pp. 32–36.
- 27. Eswaran Perumal et al., (2009), "Imperceptible Watermarking Scheme for Fundus Images Using Intra-Plane Difference Expanding", International Journal of Computer and Electrical Engineering, vol. 1, no. 4, pp. 426–430, ISBN No. 1793-8163.
- 28. Eswaran Perumal et al., (2008), "Image Retrieval in Mobile Devices using Iterative Fuzzy Color Segmentation for Criminal Identification", IETECH Journal of Advanced Computations, vol. 2, no. 2, page(s): 057–063.
- 29. Eswaran Perumal et al., (2007), "A New Fuzzy Based Approach to Color Image Edge Detection", IETECH Journal of Information Systems, vol. 1, no. 2, page(s): 046–051.
- 30. Eswaran Perumal et al., (2007), "New Approach of Fault-Tolerant in Dynamic Group Key Agreement Using Failure Detectors", IETECH Journal of Communication Techniques, vol. 1, no. 1, page(s): 13–19.
- 31. K. Shankar and P.Eswaran, (2015), "An Efficient Image Encryption Technique Based on Optimized Key Generation in ECC using Genetic Algorithm", Joint International Conference ICCCPT 2015 & ICAIECES 2015, page(s): 55.
- 32. K.Shankar and P.Eswaran, (2015) "ECC Based Image Encryption Scheme with aid of Optimization Technique using Differential Evolution Algorithm", International Conference on Advances in Applied Engineering and Technology.

- 33. K.Shankar and P.Eswaran, (2016), "A New k out of n Secret Image Sharing Scheme in Visual Cryptography", Proceeding of the 10th International Conference on Intelligent Systems and Control ISCO 2016, Karpagam College of Engineering, Coimbatore, page(s): 369-374.
- 34. K.Shankar and P.Eswaran, (2016), "Performance Evaluation of Secure Share Creation Schemes in Visual Cryptography", Proceeding of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 427-431.
- 35. V.Surya and Dr.P.Eswaran, (2016) "An Optimized Image Steganographic Method based on Artificial Bee Colony Algorithm", Proceedings of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 150-154.
- 36. S.Gowsalya and Dr.P.Eswaran, (2016), "A Secure Data Hiding in Visual Cryptographic Shares", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), Proceeding of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 539-543.
- 37. K. Muthukarpagam and Dr. P. Eswaran, (2016), "Feature Extraction Based Brain Tumor Detection in MRI Images", Proceeding of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 390-393.
- 38. G.Yogeswari and Dr. P. Eswaran, (2016), "Enhancing Data Security for Cloud Environment based on AES Algorithm and Steganography Technique", Proceeding of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 227-230.
- 39. R.Ruba Mangala and Dr. P. Eswaran, (2016), "An Efficient Image Steganography using the Secured Bit Inversion Technique", Proceeding of the International Conference on Innovations in Computer Science & Technology (ICICST-2016), page(s): 142-145.
- 40. Eswaran Perumal et al., (2009), "Robust Color Edge Detection by Vectorization" proceedings of the IEEE Sponsored International Conference on Emerging Trends in Computing (ICETiC 2009), page(s): 407–410.
- 41. Eswaran Perumal et al., (2009), "Reversible, Multilayered Watermarking Scheme for Fundus Images Using Intra-Plane Difference Expanding", Proceedings of the IEEE International Advanced Computing Conference (IACC 2009), page(s): 2583–2587, ISBN: 978-981-08-2465-5, 6–7.
- 42. Eswaran Perumal et al., (2009), "A robust watermarking scheme for Fundus imagesusing intra plane difference expanding", Proceedings of the IEEE Sponsored International Conference on Emerging Trends in Computing (ICETiC 2009), page(s): 433–436.
- 43. Eswaran Perumal et al., (2009), "Wavetree Watermarking: An Authentication Scheme for Fundus Images", Proceedings of the IEEE Sponsored International Conference on Emerging Trends in Computing (ICETiC 2009), page(s): 507–511, 8th –10th January.
- 44. Eswaran Perumal et al., (2009), "Analysis of Difference Expanding Method for Medical Image Watermarking", Proceedings of the 2009 International Symposium on Computing, Communication, and Control (ISCCC 2009), pp.: 30–34.
- 45. Eswaran Perumal et al., (2008), "Fuzzy PL Transformation Based Color Edge Detection" proceedings of the 16th International Conference on Advanced Computing and Communication (ADCOM 2008), page(s): 9–12.
- 46. Eswaran Perumal et al., (2008), "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.