

Faculty Profile



Dr. Rajagopalan Devanathan

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Experience : About 48 years in Teaching , Research & Industry

Research area : Control Systems, Power Systems, Discrete Event Systems, Nonlinear Systems, Satellite Image processing, Game theory, Computer Arithmetic and Computational Linguistics.

Recent Publications:

(Last Five years)

1. S Janakiraman and Rajagopalan Devanathan, “Linearization of Three Phase Horizontal Gravity Separator”, International Journal of Automation and Control, UK., Vol. 15, No.6, 2021, pp.744-773
2. S Janakiraman and R Devanathan, “ Tuning Linearizing Transformation Using Back – Propagation Algorithm”, Advanced Aspects of Engineering Research, Book Publication International, India, UK , 2021
3. S Lakshmisridevi and R Devnathan, “ Authorship Attribution Using Regression Model, Chapter 26 in (Ed: Jennifer S Raj) International Conference on Mobile Computing and Sustainable Informatics, 2020, ICMCSI 2020, A Springer Publication
4. Mutum Bidyarani Devi, , Rajagopalan Devanathan,” Evaluation of Pansharpening Techniques using Lagrange Optimization”, Advances in Technology Innovation, vol. 5, no. 3, 2020, pp. 166-181
5. Janakiraman S and R Devanathan, “Tuning Linearization Transformation using Back-propagation Algorithm”, International Journal of Engineering and Advanced Technology, Volume-9 Issue-1, October 2019 in Regular Issue
6. Mutum Bidyarani Devi, , Rajagopalan Devanathan, “Pansharpening of remote sensing data of earth satellite images”, Procedia Environmental Science, Engineering and Management 6 (2019) (3), 353-363
7. Rajasekhar A and R Devanathan , Application of Individual Channel Design to Server Control, International Journal of Innovative Technology and Exploring Engineering, Vol.8, Issue 9, 2019

8. Lairenjam Obiroy Singh, Rajagopalan Devanathan, Study of Performance of Bio-Inspired Strategies Applied to Pursuit Evasion Game Under Feedback Laws, *Advances in Science, Technology and Engineering Systems Journal* , Volume 4, Issue 3, , 2019
9. Reshmila S, and Devanathan R , “Diagnosability of a class of discrete event systems based on observations”, Accepted for publication in *Control Theory and Technology*, Springer, 2019
10. Rajasekhar A and R Devanathan, “Closed Loop Decoupling Control of a Computer Server System”, *Journal of Advanced Research in Dynamical and Control Systems*, Dec 2018, (ISSN 1943-023X)
11. C E Geethadevi and R Devanathan, “Linearization of STATCOM”, Eighth Power India International Conference, PIICON NIT, Kurukshetra, Dec 2018
12. Mutum Bidyarani Devi , R Devanathan. “Data Fusion of Panchromatic and Multispectral Images based on Optimization Using Lagrange Multiplier ”, *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume IV-5, 2018 ISPRS TC V Mid-term Symposium “Geospatial Technology – Pixel to People”, 20–23 November 2018, Dehradun, India.
13. Mutum Bidyarani Devi , R Devanathan . “Fusion of Panchromatic and Multispectral Images Using Lagrange Multiplier”. *Proceedings Asian Conference on Remote Sensing 2018*, 2155-2163, 15-19 , October 2018, Kuala Lumpur, Malaysia.
14. Mutum Bidyarani Devi, R Devanathan, “Pansharpener Using Data Driven Model Based on Linear Regression”. *2018 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)*, 1-6, 16-17 , March, 2018, Bangalore.
15. Georgina Binoy Joseph and R. Devanathan, “Design and Analysis of Online Arithmetic Operators for Streaming Data in FPGAs”, Chapter 22, *Advanced Engineering Research and Applications*, Research India Publications, ISBN: 978-93-87374-27-0, 2018
16. Georgina Binoy Joseph and R. Devanathan, “ Algorithms for Multiplierless Multiple Constant Multiplication in Online Arithmetic”, *Circuits, Systems and Signal Processing*, Springer USA, SSN 0278-081X, <https://doi.org/10.1007/s00034-018-0811-y>, 2018
17. Georgina Binoy Joseph and R Devanathan, “Computation of Design Metrics in Online Arithmetic Networks”, 978-1-5386-5744-7/18/ IEEE Xplore, 2018.
18. L. Obiroy Singh and R. Devanathan, “Comparative Study of the Performance of Application of Bio-Inspired Strategies to Pursuit Evasion Game Under Feedback Laws,” *Proc. 18th International Conference on Control, Automation and Systems*, South Korea, 2018, pp. 276–281.
19. L. Obiroy Singh and R. Devanathan, “Performance improvement of bio-inspired strategies through feedback laws,” in *Advances in Intelligent Systems and Computing* ,Morroco, 2018, pp. 143–156.
20. S Janakiraman and Rajagopalan Devanathan. “An Analysis of Quadratic Linearization of Three Phase Horizontal Gravity Separator”, *International Conference on Control*,

Decision and Information Technologies "CoDIT-2018". (IEEE Xplore), Thessaloniki, Greece, 10-13 April 2018.

21. S.Lakshmisridevi, R.Devanathan , “ Regression Model of Rank -Frequency Data of Tamil Text “ International journal of Engineering and Technology, Aug 2018
22. S.Lakshmisridevi, R.Devanathan, “ An Analysis of Variation of Model Parameters of Text Rank -Frequency data with Corpus size “, Journal of Advanced Research in Dynamical and Control Systems, 2018
23. S.Lakshmisridevi, R.Devanathan , “Authorship Attribution using a Regression Model of Text” , Proceedings of 2018 International Conference on Electronic , Computing and Communication Technologies , CONECCT 2018, Bangalore.
24. Rajasekhar A and R Devanathan ,” Decoupling Control of Computer Server System”, IEEE International Conference on Electronics, Computing and Communication Technologies 2018, Bangalore.
25. Georgina Binoy Joseph and R. Devanathan, “ A Mathematical Framework for Online Constant Coefficient Multiplication” International Journal of Engineering and Technology Innovation (IJETI, Taiwan), ISSN: 2223-5329 (print), ISSN: 2226-809X (online), 2017 .
26. Bhuvanadas ARUNA and Rajagopalan DEVANATHAN, “ Necessary and sufficient condition for modified Nevanlinna-Pick interpolation for closed-loop pole placement”, Control Theory and Technology, Springer , 2017
27. Joseph, G.B., Devanathan, R, “A mathematical framework for online constant coefficient Multiplication”, International Journal of Engineering and Technology Innovation, 2017
28. S.Lakshmisridevi, R.Devanathan “Linear Regression Model of Frequency Spectrum of Text” International Journal of Control Theory and Applications” , March 2017 .
29. S.Lakshmisridevi, R.Devanathan “Modification of Zipf -Mandelbrot Law for Text Analysis using Linear Regression “, Proceedings of Second International conference on Recent Trends in Computer Science and Electronics 2017, Kuala Lumpur , Malaysia, 02-03 Jan 2017, Paper 180.
30. Mutum Bidyarani Devi, R Devanathan, “Pansharpening Using Data driven Model” Proceedings National Conference on Small Satellites Technology and Applications (NCSSTA), December, 2017, Chennai.
31. S Janakiraman and Rajagopalan Devanathan. “Quadratic Linearization of Three Phase Gravity Separator Model”, IEEE International (biennial) Conference on “Technological Advancements in Power & Energy– TAP Energy 2017” Amrita Vishwa Vidyapeetham, Amritapuri, Kerala.
32. S.Lakshmisridevi, R.Devanathan “An Analysis of Variation of Model Parameters of Text Rank -Frequency data with Corpus size” Proceedings of Second International Conference on Sustainable Computing Techniques in Engineering Science and Management ’2017 Belgavi , 27-28 Jan 2017

33. S.Lakshmisridevi, R.Devanathan “Linear Regression Model of Frequency Spectrum of Text” Proceedings of 3rd International Conference in Advanced Computer Science and Engineering 2017 Hyderabad , 04 Feb 2017
34. C E Geethdevi , R Devanathan, “ Linearization of STATCOM”, Proc. National Conference Proceedings, Viswajyothi College of Engineering and Technology, Kerala, June 2017
35. Georgina Binoy Joseph and R.Devanathan, “Design and Analysis of Online Arithmetic Operators for Streaming Data in FPGAs”, International Journal of Applied Engineering Research, 2016