

Name : Dr. D. Vinod Kumar
Present Designation : Professor
Department : Electronics and Communication Engineering
Institution Name : Vinayaka Mission's Kirupanada Variyar Engineering College,
Mobile Number : 9894920472
E-Mail Address : vino.kd@gmail.com
Specialization : Biometrics, Image Processing, Machine Learning

Papers in International Journals

1. **Vinod Kumar. D**, Charles Rajesh Kumar. J, Baskar D, Mary Arunsi “Energy-Efficient and Secure IoT architecture based on a Wireless Sensor Network Using Machine Learning to Predict Mortality Risk of patients with CoVID-19” 6th International Conference on Communication and Electronics Systems (ICCES), 2021. (Scopus)
2. **Vinod Kumar. D**, M.A. Majid Charles Rajesh Kumar. J, Sujay Mhaske, Akshay Lenze, Jyotirmay Brahma, Akshay Wadgaonkar, Vijay Kanneganti, “Assessment of Optimum Installation and Power Injection Parameters for a Bifacial Rooftop System” International Journal of Renewable Energy Research (IJRER), ISSN - 1309-0127 Vol. 11, Issue 02, 2021. (Scopus)
3. **Vinod Kumar D**, Kannan S, Baskar D “Tongue Print as a Biometrics Trait for Personal Authentication” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 66, 2021. (WoS)
4. **Vinod Kumar D**, Murali G, Baskar D “Finger Knuckle Print as a Biometrics Trait for Personal Authentication” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 66, 2021. (WoS)
5. **Vinod Kumar D**, Ezhilan R, Baskar D “Biomedical Image Compression using Convolutional Recurrent Neural Network & Long Short-Term Memory” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 66, 2021. (WoS)
6. **Vinod Kumar D**, Kalanidhi K, Baskar D “Power Line Transmission Failure Detection using Statistical Feature Classification Methods” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 66, 2021. (WoS)

7. **Vinod Kumar D**, Ezhilan R, Baskar D “Image Compression based on Machine Learning Methods- Survey on Recent Advancements” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 65, 2021. (WoS)
8. **Vinod Kumar D**, Kalanidhi K, Baskar D “Transmission Power Line Fault Detection based on Deep Learning Methods- Survey on Recent Advancements” Indian Journal of Natural Sciences, ISSN - 0976-0997 Vol. 12, Issue 65, 2021. (WoS)
9. Ramakrishna Prabu, G., Arulprakash, P.M., **Vinod Kumar D** “Design and implementation of modified multistage converter based efficient battery charging controller for RBS” Journal of Green Engineering, ISSN - 2245-4586 Vol. 10, Issue 11, 2020. (Scopus)
10. R. Sathish, D. Baskar, **D. Vinod Kumar** “Efficient Point based Feature Extraction Methods for Palmprint Biometric System” Solid State Technology, ISSN - 0038-1115X Vol. 63, Issue 01, 2020. (Scopus)
11. R. Sathish, **D. Vinod Kumar**, V. Balasubramaniam, A. Govindaraji “Design and Implementation of Power Transformer Fault Identification using IOT” Journal of Critical Reviews, ISSN - 2394-5125, Vol. 07, Issue 05, 2020. (Scopus)
12. Charles Rajesh Kumar J. **Vinod Kumar D**. Baskar. D, Mary Arunsi B, Jenova R, MA Majid “Offshore wind energy status, challenges, opportunities, environmental impacts, occupational health, and safety management in India” Energy & Environment, ISSN - 2048-4070, Sage Journals - August 2020. (Scopus)
13. R Sathish, **D Vinod Kumar**, C. Senthilkumar “Design and Implementation IOT based Industrial Sub Station Monitoring and Control System” Journal of Advanced Research in Dynamical & Control Systems, ISSN - 1943-023X, Vol. 12, 07-Special Issue, 2020. (Scopus)
14. R Sathish, **D Vinod Kumar**, G Manimegalai “Design and Implementation of IMC-WPT System with Efficient Control Management Strategy for Vehicle to Grid Application” Journal of Advanced Research in Dynamical & Control Systems, ISSN - 1943-023X, Vol. 12, 07-Special Issue, 2020. (Scopus)
15. Charles Rajesh Kumar J. **Vinod Kumar D**. Baskar. D, Mary Arunsi B, Jenova R, MA Majid “VLSI design and implementation of High-performance Binary-weighted convolutional artificial neural networks for embedded vision-based Internet of Things (IoT)” Procedia Computer Science, ISSN - 1877-0509, Vol. 163, 2019. (Scopus)

16. Pushparani M.K, **Dr. D Vinod Kumar**, Dr. Abdulla Gubbi “Areca nut Grade Analysis using Image Processing Techniques” International Journal of Engineering Research & Technology ISSN - 2278-0181, Vol.7, Issue 10, June 2019. (UGC)
17. Pushparani M.K, **Dr. D Vinod Kumar**, Dr. Abdulla Gubbi “Brain Tumor Detection using Hidden Markov Chain Algorithm in Image Processing” International Journal of Engineering Research & Technology ISSN - 2278-0181, Vol.7, Issue 8, June 2019. (UGC)
18. R. Sathish, **D.Vinod Kumar** “Design And Implementation Of MPPT Based Constant Power Generation Controller For Grid-Connected PV System” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
19. R. Sathish, **D.Vinod Kumar** “Modified Power Compensation Synchronous Reference Frame Control Strategy of Three-Phase Grid-Connected Inverter Unbalanced Grid Voltage Conditions” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
20. R. Sathish, **D.Vinod Kumar** “11kv Sub Station Automation System Using Arduino With Iot” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
21. R. Sathish, **D. Vinod Kumar** “Autonomous Operation of Enhancing the Performance of Hybrid Microgrid using Transformation intrinsic algorithm” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
22. R. Sathish, **D. Vinod Kumar** “DFIG wind turbine stability analysis and harmonics Reduction based on intellectual power control algorithm” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
23. R. Sathish, **D. Vinod Kumar** “Analysis of PV Inverter and Super Capacitor Energy Storage System based on Perturbation and Observation State Estimation Algorithm” Journal of Applied Science and Computations ISSN - 1076-5131, Vol.6, Issue 5, May 2019. (UGC)
24. Charles Rajesh Kumar J, **Vinod Kumar D** and MA Majid “Wind Energy Programme in India: Emerging Energy Alternatives for Sustainable Growth” Energy & Environment ISSN 2048-4070, Sage Journals -April 2019. (Scopus)
25. S.Mathankumar, **D. Vinodkumar**, S.Vaishnodevi, S.Kannan “Patient Monitoring System Based on Wireless Saw Radio Frequency with GSM” International Journal of

Advance Research and Innovative Ideas in Education, ISSN(O)-2395-4396, Vol. 5, Issue 2, April 2019. (UGC)

26. R. Sathish, **D. Vinod Kumar** “Pyro and PV Energy Storage with DC lighting Control by using Light Intensity” International Research Journal in Advanced Engineering and Technology ISSN **2454-4752**, Vol. 5, Issue 1, Feb 2019. (UGC)
27. **D. Vinodkumar**, P. Sridharan K. Kalanidhi “Transmission Power Line Fault Detection based on Deep Learning Methods” Indian Journal of Power & River Valley Development ISSN 0019-5537, Vol. 69, Issue 3, Jan 2019. (UGC)
28. R. Sathish, **D. Vinod Kumar**, C. Balamurugan “An Improvement Quality of Self - Braking System of Two Wheeler with Closer Calculate and High Level Safety System” Journal of Applied Science and Computations, ISSN - 1076-5131, Volume 6, Issue 5, Year 2019, Pages 1887-1892. (UGC)
29. R. Sathish, K. K. Kannan, D. Vinod Kumar “OTP based EB Line Man Safety System with Automatic Transformer Trip Intimation TO Sub Station and Section” Journal of Applied Science and Computations, ISSN - 1076-5131, Volume 6, Issue 5, Year 2019, Pages 1893-1899. (UGC)
30. A. Muthukrishnan, J. Charles Rajesh Kumar, **D. Vinod Kumar**, M. Kanagaraj “Internet of Image Things-Discrete Wavelet Transform and Gabor Wavelet Transform based Image Enhancement Resolution Technique for IoT Satellite Applications”, *Cognitive Systems Research* ISSN 1389-0417, ELSEVIER – Oct 2018. (Scopus)
31. Pushpa Rani M K, **Dr. D. Vinod Kumar**, Dr. Abdulla Gubbi, Dr. Dattatraya “Speaker Recognition Technique for Web Browser using MFCC Algorithm and RGB Colour Detection for Mouse Curser Movement”, *International Journal of Engineering Research & Technology (IJERT)*, ISSN 2278-0181, NCESC – 2018 Conference Proceedings. (UGC)
32. **Dr. D. Vinod Kumar**, Dr. A. Nagappan “Performance Analysis of Security and Accuracy on Palmprint Based Biometric Authentication System”, *International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE)*, Vol. 3, Issue 7, July 2015. (UGC)
33. M. Manobala, N. Manikanda Deverajan, Dr .A. Nagappan, **Dr. D. Vinod Kumar** “A Modified Design of FFT Architecture for Wi-Max OFDM Standards to Support both Variable Length and Multi-streaming”, *International Journal of Innovative Research in*

Computer and Communication Engineering (IJIRCCE), Vol. 3, Issue 4, April 2015. (UGC)

34. **Vinod Kumar D**, Dr. Nagappan A, Jyoti Malik “Phase Congruency Corner Detection as Biometric Feature”, *International Journal of Computer Science, Information Technology, & Security (IJCSITS)*, Vol. 2 No 1, Pages 179-185, February 2012. (UGC)
35. **Vinod Kumar D**, Dr. Nagappan A “Study and comparison of various Point based Feature Extraction methods in Palmpoint Authentication System”, *International Journal of Computational Engineering Research*, Vol. 2 Issue 8, Pages 82-89, December 2012.
36. O. Saravanna, A. Nagappan, P. Gnanasekar, S. Sharavanan, **D. Vinodkumar**, T. Elayabharathi, G. Karthik “Web Server with Multi Agent Support for Medical Practitioners by Jade Technology” *World Academy of Science, Engineering and Technology, Bangkok, International Journal of Computer, Electrical, Automation, Control and Information Engineering* Vol:5, No:12, Pages 323-326, December 2011. (Scopus)
37. S. Sharavanan, A. Nagappan, P. Gnanasekar, O. Saravanan, **D. Vinodkumar**, T. Elayabharathi and G. Karthik, “Efficient Palmpoint and Palm vein based person recognition using Junction Point with Correlation Method”, *World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering* Vol:5, No:12, Pages 1063-1068, December 2011. (Scopus)
38. P. Gnanasekar, A. Nagappan, S. Sharavanan, O. Saravanna, **D. Vinodkumar**, T. Elayabharathi, G. Karthik, “Investigation on feature extraction and classification of medical images” *World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering* Vol:5, No:12, Pages 327-332, December 2011. (Scopus)

Books Published:

1. Step into Deep Learning, Notion Press, August 2021, ISBN- 9781685380403.
2. Artificial Intelligence & Applications, Notion Press, July 2021, ISBN- 9781685093594.
3. Web Integrating Machine Learning, Notion Press, July 2021, ISBN- 9781685091132

Patents

1. An Automated IOT based Agriculture Monitoring System with Plurality of Sensors to Detect Parameters Related Thereoff. Indian Patent, 2019. (Published)

2. An Artificially Intelligent System for Real-Time Monitoring of Glucose and other Intravenous (I.V) Infusions. Indian Patent, 2021. (Under Examination)
3. An AI based Smart Portable Bed with Automated Injecting System and Method Thereof. Indian Patent, 2021. (Under Examination)