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1. Patent

- i. Implantable Baton Antenna using Coplanar waveguide (CPW) feed - Appl. No. 201941035032, Filed date: August 30, 2019.
- ii. Preethi Kurian, Vijay Jeyakumar, Unsupervised Multimodality Medical Image Retrieval System, (Patent Application No: 202041043275 filed on 05.10.2020) was published online on 19 September 2020.
- iii. S. Subashini, S N Jaya Sree, Vijay Jeyakumar, Nirmala K Smart Phone enabled Dermatoscope for Automated Skin Lesion Classification using Convolutional Neural Network (Patent Application No: 202041043279, 05.10.2020) was published online on 19 September 2020.

**List of Publications**

2. Books Published:

- a) Image Retrieval Systems in PACS Environment, LAP Lambert Academic Publishing, German, 2016, ISBN – 13:978-3-330-00062-9.
- b) Basic Electrical Engineering, Scitech Publications, Chennai, ISBN – 978-81-8371-264-4

14. Book Chapters:

- a) Balu S., Jeyakumar V. (2021) A Study on Feature Extraction and Classification for Tongue Disease Diagnosis. In: Peter J., Fernandes S., Alavi A. (eds) Intelligence in Big Data Technologies—Beyond the Hype. Advances in Intelligent Systems and Computing, vol 1167. Springer, Singapore. [https://doi.org/10.1007/978-981-15-5285-4\\_34](https://doi.org/10.1007/978-981-15-5285-4_34)
  - b) Preethi Kurian, Vijay Jeyakumar, Multimodality medical image retrieval using convolutional neural network, Deep Learning Techniques for Biomedical and Health Informatics, Academic Press(Elsevier), Pp 53 - 96, Jan 2020. ISBN (Print): 978-0-128-19062-3
  - c) Karthiga Nagaraj, Vijay Jeyakumar, A Study on Comparative Analysis of Automated and Semi-automated Segmentation Techniques on Knee Osteoarthritis X-Ray Radiographs, Lect. Notes on Computational Vision, Vol. 30, pp 1655-1666,
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Springer, 2019, ISBN (Print): 978-3-030-00664-8.

- d) Vijay Jeyakumar, Bommanna Raja Kanagaraj, A Medical Image Retrieval System in PACS Environment for Clinical Decision Making, Intelligent Data Analysis for Biomedical Applications, Challenges and Solutions, Intelligent Data-Centric Systems, pp 121-146, Academic Press (Elsevier), 2019, ISBN - 978-0-12-815553-0.

#### Journal Publications

1. Mahalakshmi Nachiappan, Thenmozhi Alagarsamy **Vijay Jeyakumar** (2019), Design of Mirror E-Shape Implantable Antenna For Biomedical Applications, Journal of Applied Mathematics & Information Sciences Volume 13, No. S1 (Aug. 2019), PP:25-30, (*TR Indexed*), **IF – 1.232**
2. N.Mahalakshmi, A.Gobinath, **Vijay Jeyakumar**, Design And Analysis Of X-Ma Implantable Antenna For Bio-Medical Applications, International Journal of Information and Computing Science, Vol. 6, Issue 5, May 2019.
3. **Vijay Jeyakumar**, Bommanna Raja Kanagaraj (2015), A Framework for Medical Image Retrieval System using Ant Colony Optimization and Weighted Relevance Feedback”, Journal of Medical Imaging and Health Informatics, vol.5, no.7, pp.1383-1389. (*Scopus Indexed*), **IF – 0.642**.
4. **Vijay Jeyakumar**, Bommanna Raja Kanagaraj (2015), Weighted Relevance Feedback and keyword-based medical Image Annotation”, ARPN Journal of Engineering and Applied Sciences, Vol.10, Issue 9, pp 4072-4077, May 2015. (*Scopus Indexed*), **IF –0.542**
5. **Vijay Jeyakumar**, Bommanna Raja Kanagaraj (2015), „Performance Evaluation of Image Retrieval System Based on Error Metrics”, Indian Journal of Science and Technology, vol.8, S(7), 117-121, April 2015, DOI: 10.17485/ijst/2015/v8iS7/64950, (*Scopus Indexed*).

#### International Conference Proceedings

1. S. Shamena Selas, **J. Vijay**, S. Arun Karthick and S. Saraswathi, "Preparation and Analysis of Nanomaterials for Smart textile in Continuous Monitoring of Physiological Parameters," *2020 5th International Conference on Devices, Circuits and Systems (ICDCS)*, Coimbatore, India, 2020, pp. 307-310, DOI: 10.1109/ICDCS48716.2020.243605.
  2. Saritha Balu, **Vijay Jeyakumar**, “A Study on Feature Extraction and Classification for Tongue Disease Diagnosis, Intelligence in Big Data Technologies – Beyond the hype”, Proceedings of 3rd ICBDDC 19, Coimbatore, Pp – 36, December 2019.
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3. Preethi Kurian, **Vijay Jeyakumar**, Comparative Analysis on Convolutional Neural Networks for Multimodality Medical Image Retrieval System”, International Conference on Mathematical Computer Engineering (ICMCE-2018), Vellore Institute of Technology, Chennai, November 23-24, 2018. (Best Presentation Award).
  4. Karthiga Nagaraj, **Vijay Jeyakumar**, “A Study on Comparative Analysis of Automated and Semi-automated Segmentation Techniques on Knee Osteoarthritis X-Ray Radiographs” Proceedings of the 2018 International Conference on ISMAC in Computational Vision and Bio-Engineering (ISMAC - CVB), Coimbatore, May 16 – 17, 2018, Pp 1605 -1615.
  5. Ramesh Duraisamy, Siddharth Dinakar, Vishnusankar Venkittaramanujam, **Vijay Jeyakumar**, “A Systematic Approach for Pulse Diagnosis based on Siddha Medical Procedures”, Fourth International Conference on Signal Processing, Communications and Networking (ICSCN’17), MIT Campus, Anna University, March 16 – 18,2017.
  6. Ramesh Duraisamy, SiddharthDinakar, VishnusankarVenkittaramanujam, **Vijay Jeyakumar**, “Design and Development of E – Pulse Diagnosis System for Traditional Tamil Medicine”, IEEE International Conference on Science, Technology, Engineering and Management (ICSTEM’17), Kalaignarkarunanidhi Institute of Technology, Coimbatore, March 3 – 4, 2017. (Best Paper Award).
  7. **Vijay Jeyakumar**, Bommanna Raja Kanagaraj, “Automatic Medical Image Retrieval using Weighted Relevance Feedback”, Second IEEE International Conference on Innovations in Information, Embedded and Communication Systems, Karpagam College of Engineering, vol.7, pp.1089-1094, March 2015. ISBN(CD):9781479968169.
  8. Jeyappradha, Lavanya, Sridhanya, **Vijay Jeyakumar**“Online Electronic Voting System”, International Conference on Recent Advances and Innovations in Engineering and Technology, Ranganathan Engineering College, Coimbatore, 20-21 March 2015
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