

## List of selected recent publications

### I. Indian Patent (filed)

B. Rajesh Kanna, "Secured Information Exchange method & System using Haptic codes", reference no. E2/1890/2018-CHE dated on 17.06.2019

B. Rajesh Kanna, A. Vijayalakshmi, C. Vijayalakshmi, "Method to normalize microscopic image feature to facilitate robust learning in clinical pathology, Application number: 202041036034 dated 25.08.2020

### II. International Journals

[1] A. Vijayalakshmi, B. Rajesh Kanna, Deep learning approach to detect malaria from microscopic images, Multimedia Tools and Applications, Springer, 79, 15297-15317, 2020, DOI : 10.1007/s11042-019-7162-y

[2] Dinesh Jackson Samuel R, Rajesh Kanna B Cybernetic microbial detection system using transfer learning. Multimedia Tools and Applications, Springer, 79, 5225–5242, 2020, DOI: <https://doi.org/10.1007/s11042-018-6356-z>

[3] Bharathiraja S, Rajesh Kanna B, Anti-Forensics Contrast Enhancement Detection (AFCED) Technique in Images Based on Laplace Derivative Histogram, Mobile Networks and Applications, 24 (4) 1174-1180, 2019, DOI: <https://doi.org/10.1007/s11036-019-01255-1>

[4] R.D Jackson Samuel, B. Rajesh Kanna, A Programmable microscopic stage: Design and Development, Microscopy research and Technique, Wiley, 82(4), 429-442, 2019, DOI 10.1002/jemt.23184

[5] R.D Jackson Samuel, B. Rajesh Kanna, Tuberculosis Detection system using Deep neural networks, Neural Computing and Applications, Springer, 31(5), 1533-1545, 2019, DOI: 10.1007/s00521-018-3564-4,

[6] B. Rajesh Kanna, Mohd Shafi Bhat , Vijayalakshmi C , Alex Noel Joseph Raj, Model to estimate the salt and pepper noise density level on gray-scale digital image, EAI Endorsed Transactions on Energy Web and Information Technologies, 5 (6), 1-7, 2018

[7] B. Rajesh Kanna, C. Aravindan and K. Kannan, Image-based area estimation of any connected region using y-convex region decomposition, AEU - International Journal of Electronics and Communications, 66, 2, February 2012, 172-183, DOI: <http://dx.doi.org/10.1016/j.aeue.2011.06.010>

### III. International Conference

[1] A. J. George Ebbinason and B. Rajesh Kanna, "ColorFingers: improved multi-touch color picker", in proceedings of SIGGRAPH Asia 2014 Technical Briefs (SIGGRAPH Asia 2014). ACM, New York, NY, USA, Article 13 , 4 pages. DOI=<http://dx.doi.org/10.1145/2669024.2669033>

[2] Saurabh Jha, Tejaswi Agarwal and B. Rajesh Kanna, Exploiting data parallelism in the yConvex hypergraph algorithm for image representation using GPGPUs, in Proceedings of International Conference on Supercomputing (ICS-12) , 475-476, 2013  
DOI:[acm.org/10.1145/2464996.2467269](http://acm.org/10.1145/2464996.2467269)

[3] Tejaswi Agarwal, Saurabh Jha and B. Rajesh Kanna, P-HGRMS: A Parallel Hypergraph Based Root Mean Square Algorithm for Image Denoising, in Proceedings of 22nd International ACM Symposium on High-Performance Parallel and Distributed Computing (HPDC 13), abs/1306.5390, 2013, DOI:[arxiv.org/abs/1306.5390](http://arxiv.org/abs/1306.5390),

[4] B. Rajesh Kanna, Chandrabose Aravindan, and K. Kannan, Development of yConvex hypergraph model for contour based image analysis, in Proceedings of the 2nd IEEE International Conference Computer Communication and Informatics (ICCCI), 2, 1-5, 2012. DOI:[dx.doi.org/10.1109/ICCCI.2012.6158806](http://dx.doi.org/10.1109/ICCCI.2012.6158806)

[5] B. Rajesh Kanna, Chandrabose Aravindan, and K. Kannan, A contour based scheme for representing arbitrary shapes in digital images, in Proceedings of the International Conference & Workshop on Emerging Trends in Technology (ICWET '11), ACM, 2011, 535-540. DOI: [doi.acm.org/10.1145/1980022.1980137](http://doi.acm.org/10.1145/1980022.1980137)

#### **IV. Books**

[1] B. Rajesh Kanna, Development of Hypergraph based Techniques for Selected Image Engineering Applications, Archers & Elevators Publishers, Bangalore, 2018, ISSN/ISBN Nos: 978-93-86501-63-9,

#### **V. Book Chapters (Scoups Indexed)**

[1] Siva Vignesh, B. Rajesh Kanna, "AWS Infrastructure Automation and Security Prevention Using DevOps", Artificial Intelligence and Evolutionary Computations in Engineering Systems, Advances in Intelligent Systems and Computing, Volume 1056, 2020, 537-549, Springer, Singapore, DOI:/10.1007/978-981-15-0199-9\_46

[2] Sivakumar S., Rajalakshmi R., Prakash K.B., Rajesh Kanna.B, Karthikeyan C. (2020) Virtual Vision Architecture for VIP in Ubiquitous Computing. In: Paiva S. (eds) Technological Trends in Improved Mobility of the Visually Impaired. EAI/Springer Innovations in Communication and Computing. Springer, 145-179, First Online, 02 July 2019,  
DOI: [https://doi.org/10.1007/978-3-030-16450-8\\_7](https://doi.org/10.1007/978-3-030-16450-8_7)

[3] B. Rajesh Kanna, "Secured Information Exchange Using Haptic Codes." Countering Cyber Attacks and Preserving the Integrity and Availability of Critical Systems. IGI Global, 2019. 267-274. Web. 16 May. 2019. doi:10.4018/978-1-5225-8241-0.ch014

[4] Vijayalakshmi A., Rajesh Kanna B., Banukumar S. (2018) Estimation of Texture Variation in Malaria Diagnosis, Computational Signal Processing and Analysis. Lecture Notes in Electrical Engineering, vol 490, 325-334, Springer

[5] Kar D., Rajesh Kanna B. (2018) A Novel Video Analytics Framework for Microscopic Tracking of Microbes. Computational Signal Processing and Analysis. Lecture Notes in Electrical Engineering, vol 490. 115-128, Springer

[6] B. Rajesh Kanna, Devarati Kar, Sandra Felice and Nikhil Joseph, "Intuitive Touch Interaction to Amputated Fingers", Smart Innovation, Systems and Technologies, Springer, Volume 49, (2016) 387-397, DOI 10.1007/978-3-319-30348-2