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WORK EXPERIENCE	Camellia Institute of Technology Assistant Professor	January 2016 — 2018
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EDUCATION	PhD Jadavpur University	March, 2017 — 2024
	Master of Electrical Engineering Jadavpur University DGPA 8.00	August 2012 — June 2014
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QUALIFICATIONS : **PhD**

M.E. THESIS : **Visual And Infrared Patch-wise DCT Based Image Fusion Using Artificial Bee Colony Optimization and Image Segmentation**

PhD Thesis **: AUTOMATIC GRADING OF VESSEL TORTUOSITY IN RETINAL FUNDUS IMAGES**

GATE 2012 : AIR 414, Score 522

PROJECTS : MSME IDEA HACKATHON 2.0 (Theme Basesd)

Reference No. :- IDEAWB005530

TITLE: Prevalence of Diabetic Retinopathy and its Associated Factors in a Rural Area Based on Deep Learning for Computer-aided Diagnosis

PATENTS: 1. Title: Deep Learning-Based Diagnostic device for Diabetic Retinopathy

Application Number: 409329-001 , Cbr Number: 203548, Cbr Date: 02/03/2024 16:41:00

Design Accepted and Published, Journal No is 18/2024 and Journal Date is 03/05/2024

2. TITLE OF INVENTION : AI AND IMAGE PROCESSING BASED MEDICINE STOCK MAINTENANCE SYSTEM FOR HOSPITALS

APPLICATION NUMBER : 202441006972 , PUBLICATION DATE (U/S 11A) 23/02/2024

CONSULTANCY: "Diabetic Retinopathy on Deep Learning for Computer-aided Diagnosis System" has been approved by Ramakrishna Sarada Mission Ashram Netralaya (Eye Hospital & Research Centre) September 24, 2024.

DECLARATION: I hereby declare that all the information provided above is true to the best of my knowledge & belief.

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- **International Journal:**

1. **Debasis Maji**, Arif Ahmed Sekh,"Automatic grading of retinal blood vessel in deep retinal image diagnosis"in Journal of Medical Systems(Springer US), Volume 44, Issue 10, Pages 1-14,2020/10
2. **Debasis Maji** , Souvik Maiti , Ashis Kumar Dhara , Gautam Sarkar ,"Automatic grading of retinal blood vessel tortuosity using Modified CNN in deep retinal image diagnosis " in Biomedical Signal Processing and Control (Elsevier),Volume 74,pages-103514, year-2022
3. Souvik Maiti , **Debasis Maji** , Ashis Kumar Dhara , Gautam Sarkar ," Automatic detection and segmentation of optic disc using a modified convolution network " in Biomedical Signal Processing and Control (Elsevier),Volume 76,pages-103633, year-2022

4. **Debasis Maji** , Asit Kumar Mondal , Banshidhari Samanta ,Palash Pal ,Dilip Dey,"Improved Chan-Vese Image Segmentation Model for Visible-Infrared Image Fusion Using PCA" in Turkish Journal of Computer and Mathematics Education (TURCOMAT), Volume11,Issue3,Pages 1813-1827,year-2020

5. Souvik Maiti , **Debasis Maj**i , Ashis Kumar Dhara , Gautam Sarkar ," Anattention enriched encoder–decoder architecture with CLSTM and RES unit for segmenting exudate in retinal images " in Signal, Image and Video Processing (Springer), doi.org/10.1007/s11760-024-02996-7, 10th February year-2024.

- **International Conference:**

1. **Debasis Maji**, Souvik Maiti, Mainak Biswas, Goutam Kumar Ghorai, Sandip Sadhu khan, Debprasad Sinha, Ashis Kumar Dhara, Gautam Sarkar, "Automatic Patch Based Tortuosity Retinal Vessel Classification using VGG16 Network", IEI Impact in Changing Energy Mix in the Power Sector, 2019, Kolkata, India.

2. Mainak Biswas, **Debasis Maji**, Souvik Maiti, Goutam Kumar Ghorai, Sandip Sadhukhan, Debprasad Sinha, Ashis Kumar Dhara, Gautam Sarkar, "Pulmonary Nodule Segmentation using Adaptive Thresholding", IEI Impact in Changing Energy Mix in the Power Sector, 2019, Kolkata, India.
3. **D Maji**, M Biswas, G Sarkar, "BSEMD Based Automatic Microaneurysm Localization from Fundus Image", IEEE 3rd International Conference on Trends in Electronics and Informatics (ICOEI 2019), 2019, Tamilnadu, India.
4. Mainak Biswas , **Debasis Maji** , Ashis Kumar Dhara , Gautam Sarkar, "Segmentation of Pulmonary Nodules Based on Modified Framework Using Hybrid Level-Set", IEEE 16 th International Symposium on Biomedical Imaging (ISBI 2019), 2019, Venice, Italy.
5. **D Maji**, M Biswas, A Bhattacharya, "Reactive Power Control of Modified IEEE 14 Bus System Using STATCOM", IEEE 2nd International Conference on Intelligent Computing and Control Systems (ICICCS 2018), 2018, Madurai, India.
6. **D Maji**, M Biswas "Edge-Based Blood Vessel Detection from Fundus Image: A Survey", IEEE International Conference on Power Energy, Environment and Intelligent Control", (PEEIC 2018), 2018, Greater Noida, India.
7. **D Maji**, M Biswas"Blood Vessel Extraction from Fundus Image", International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018) AISC – Springer , 2018, Kolkata.
8. **D Maji**, M Biswas "Discrete Wavelet Transform Based Biometric Identification Using PCA", presented in MHRD Sponsored National Seminar on Smart Technology for Social Development in The Context of Indian Languages and Workshop on Engineering Glossary , 2017, Kolkata.
9. Dipika Ghosh, Ashish Kumar Mahato, Amazing Grace Asipita Onuya, Amit Kumar Singh, Manish Kumar, Pritam Banik, Shubhamay Das, Mainak Biswas, **Debasis Maji** , Sanchita Dutta, Debashis Jana,Gautam Sarkar , "PSO based stability analysis of a computational intelligent algorithm using SOS", IEEE 8 th Annual Industrial Automation and Electromechanical Engineering Conference (IEMECON 2018), pp. 309-313, 2017, Bangkok, Thailand.
10. Ankita Chatterjee, Mainak Biswas, **Debasis Maji**, Debashis Jana, Ayoshna Saha, Sampriti Podder, Subhajit Brojabasi, Arnab Kumar Saha, Sanchari Das, Allama Hossain, Ankhi Bhattacharya,Gautam Sarkar,"Discrete Wavelet Transform Based Colon Polyp Detection Using Synthesize Similarity Measure", IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2017), 2017, Kolkata.
11. **Debasis Maji**, Mainak Biswas, Dipika Ghosh, Indranil Dey, Tanmoy Kundu, Gautam Sarkar,"Fast Adaptive Screening of Breast Cancer: Survey on Dielectric and Loss Factor",IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2017), 2017, Kolkata.
12. Mainak Biswas, **Debasis Maji**, Sharmadeb Jana, Sovan Ghosh, Sneha Bhattacharya, Swarnendu Patra, Sayid Aktar, Gautam SarkarD Maji, " Discrete Wavelet Transform Based Colon Polyp Detection Using Synthesize Similarity Measure ", IEEE International Conference on 1st International Conference on Electronics, Materials Engineering and Nano-Technology (IEMENTech), 2017, Kolkata.

13. **Debasis Maji**, Mainak Biswas, Arghya Bhattacharya, Gautam Sarkar, Tushar Kanti Mondal, Indranil Dey "MAGLEV System Modeling and LQR Controller Design in Real

Time Simulation", IEEE International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET 2016), pp. 1562-67, 2016, Chennai.

14. **D Maji**, M Biswas "Hierarchical Clustering for Segmenting Fused Image Using Discrete Cosine Transform with Artificial Bee Colony Optimization", IEEE International Conference on Computational Intelligence & Communication Technology (CICT 2016), pp. 54-59, 2016, Ghaziabad.
15. **D Maji**, M Biswas "Discrete Wavelet Transform based V-I image fusion with Artificial Bee Colony Optimization", IEEE International Conference on 7th Annual Computing and Communication Workshop and Conference (CCWC 2017), 2017, Las Vegas.
16. S. Maiti, **D. Maji**, A. K. Dhara, and G. Sarkar, "Spatial Attention Enhanced Network for Segmentation of Exudate," in 2022 IEEE Calcutta Conference (CALCON), 2022, pp. 93–97.
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18. S. Maiti, **D. Maji**, A. K. Dhara, and G. Sarkar, "Automated Segmentation of Macula in Retinal Images Using Deep Learning Methodology", in Emerging Electronics and Automation: Select Proceedings of E2A 2022, Singapore: Springer Nature Singapore, 2023.
19. **Debasis Maji**, Souvik Maiti, Ashis Kumar Dhara, Gautam Sarkar, "Automated Retinal Blood Vessel Segmentation Using Modified UNet Architecture", Springer Lecture Notes in Electrical Engineering (LNEE), Proceedings of the 4th International Conference on Communication, Devices and Computing, DOI : 10.1007/978-981-99-2710-4, ICCDC 2023, Haldia, West Bengal, INDIA
20. Suchandan Das, **Debasis Maji**, Asit Kumar Mondal, Angana Chakraborty, Choudhary Om Prakash, "Bi-directional Long Short Term Memory Based Classification of Sulphur Corrosion in Power Transformers Using Mineral Oil Data", in 2023 IEEE 3rd Applied Signal Processing Conference (ASPCON), 23January-2024, PP.66-70,ISBN- 979-8-3503-2588-1, DOI: 10.1109/ASPCON59071.2023.10396013
21. **Debasis Maji**, Souvik Maiti, Ashis Kumar Dhara, Gautam Sarkar, "Efficient Net Enriched Model for Implementing the Grading of Diabetic Retinopathy Based on Retinal Blood Vessel Tortuosity", in 2023 IEEE 3rd Applied Signal Processing Conference (ASPCON),23January-2024,PP.131-136,ISBN-979-8-3503-25881,DOI:10.1109/ASPCON59071.2023.10396362
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4. Suchandan Das, **Debasis Maji**, Asit Kumar Mondal, Angana Chakraborty, Choudhary Om Prakash, "Bi-directional Long Short Term Memory Based Classification of Sulphur Corrosion in Power Transformers Using Mineral Oil Data", in 2023 IEEE 3rd Applied Signal Processing Conference (ASPCON), 23January-2024, PP.66-70,ISBN- 979-8-3503-2588-1, DOI: 10.1109/ASPCON59071.2023.10396013