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**Experience:** 13 Years

**Qualification:** Ph.D. (Tech.), M.E., B.TECH.

**Designation:** Assistant Professor

**Area of Specialization:** Medical Image Processing, Soft Computing, Artificial Intelligence

## LIST OF PUBLICATIONS

### International Journals

1. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, Mita Nasipuri, Punam Kumar Saha, “A nonparametric method for intensity inhomogeneity correction in MRI brain images by fusion of Gaussian surfaces”, **Signal, Image and Video Processing - Springer**, vol. 9, pp. 1945-1956, 2015.
2. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, Mita Nasipuri, “Conditional Spatial fuzzy C-means clustering Algorithm for segmentation of MRI Images”, **Applied Soft Computing – Elsevier**, vol. 34, pp. 759-768, 2015.
3. Jamuna Kanta Sing, **Sudip Kumar Adhikari**, Dipak Kumar Basu, “A modified Fuzzy C-means Algorithm using Scale Control Spatial Information for MRI Image Segmentation in the Presence of Noise”, **Journal of Chemometrics – John Wiley & Sons**, vol. 29, pp. 492-505, 2015.
4. Sayan Kahali, **Sudip Kumar Adhikari**, Jamuna Kanta Sing, “On estimation of bias field in MRI images: polynomial vs Gaussian surface fitting method”, **Journal of Chemometrics – John Wiley & Sons**, vol. 30, pp. 602-620, 2016.
5. Sayan Kahali, **Sudip Kumar Adhikari**, Jamuna Kanta Sing, “A Two-Stage Fuzzy Multi-Objective Framework for Segmentation of 3D MRI Brain Image Data”, **Applied Soft Computing – Elsevier**, vol. 60, pp. 312-327, 2017.
6. Sayan Kahali, **Sudip Kumar Adhikari**, Jamuna Kanta Sing, “Convolution of 3D Gaussian Surfaces for Volumetric Intensity Inhomogeneity Estimation and Correction in

*3D brain MR Image Data*”, **IET Computer Vision**, doi: 10.1049/iet-cvi.2016.0278, 2017.

### International Conferences

1. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, Mita Nasipuri, Punam Kumar Saha, “*Segmentation of MRI brain images by incorporating intensity inhomogeneity and spatial information using probabilistic fuzzy c-means clustering algorithm*” , Proc. of International Conference on Communication, Devices and Intelligent system (**CODIS-2012**), held at Jadavpur University, Dec. 2012, pp. 133-136, 2012.
2. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, Mita Nasipuri, “*A Spatial Fuzzy C-means Algorithm with Application to MRI Image Segmentation*”, Proc. of International Conference on Advances of Pattern Recognition (**ICAPR-2015**) held at Indian Statistical Institute (ISI) Kolkata, pp. 1-6, 2015.
3. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, Mita Nasipuri, “*Conditional Spatial Fuzzy C-means Clustering Algorithm with Application in MRI Image Segmentation*”, Proc. of International Conference on Information Systems design and Intelligent Applications (**INDIA 2015**), held at Kalyani University, vol. 2, pp. 539-547, 2015.
4. **Sudip Kumar Adhikari**, Sayan Kahali, Jamuna Kanta Sing, “On estimation of bias field in MRI images”, Proc. of IEEE International Conference on Computer Graphics, Vision and Information Security (**CGVIS 2015**), at KIIT University, pp. 269-274, 2015.
5. **Sudip Kumar Adhikari**, Jamuna Kanta Sing, Dipak Kumar Basu, “*Bias Field Estimation and Segmentation of MRI Images using a Spatial Fuzzy C-means Algorithm*”, Proc. of the International Conference on Control, Instrumentation, Energy and Communications (**CIEC-2016**), at University of Calcutta, pp. 158-162, 2015.
6. **Sudip Kumar Adhikari**, Sayan Kahali, Jamuna Kanta Sing, “*3D MRI Brain Image Segmentation: A Two-Stage Framework*”, Proc. of the International Conference on Computational Intelligence, Communications and Business Analytics in Computer Science and Engineering and General Science (**CICBA-2017**), pp. 323-335, 2017.
7. Nabanita Mahata, Sayan Kahali, **Sudip Kumar Adhikari** , Jamuna Kanta Sing, “*A Fuzzy Clustering Algorithm with Local Contextual Information and Gaussian Function for Simultaneous Brain MR Image Segmentation and Intensity Inhomogeneity Estimation*”, accepted in the International Conference of Man and Machine Interface (**MAMI-2017**), 2017