Name: Dr. Sourav Pramanik

Designation: Assistant Professor

Department: Computer Science

Date of Joining: 12/08/2020

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Short Bio.: Dr. Sourav Pramanik received the Bachelor's degree in computer science and engineering from West Bengal University of Technology (WBUT), the Master's degree in Computer Science and Engineering from Jadavpur University, and the Ph.D degree in Computer Science and Engineering from Jadavpur University, India, in 2008, 2011, and 2021, respectively. He served as an Assistant Professor in the Department of Computer Science and Engineering at the National Institute of Science and Technology, India, from 2011-2014. He worked as a Junior Research Fellow in the department of Computer Science and Engineering, Jadavpur University, India from 2014-2015. His research areas include thermal image processing, computational medical imaging, active contour, and texture feature extraction.

He is the author and co-author of various refereed journals, conference proceedings, and book chapters in the areas of Biometrics and Medical Image Processing. He has been served as a regular reviewer for a number of International journals and conferences. He is the recipient of several coveted awards.

Google Scholar ID: https://scholar.google.com/citations?user=22XVjZQAAAAJ&hl=en
Vidwan ID: https://vidwan.inflibnet.ac.in/profile/218108
DBLP: https://dblp.org/pid/139/1012.html

Academic Qualifications:
- B-Tech, Computer Science and Engineering, WBUT, India, 2007
- ME, Computer Science and Engineering, Jadavpur University, India, 2011
- Ph.D, Computer Science and Engineering, Jadavpur University, India, 2021

Work Experience:

- Lecturer, Department of Bachelor's in Computer Application, AMEX (an institute for professional studies), Affiliated to the University of Burdwan, India, 2007-2009
- Assistant Professor, Department of Computer Science and Engineering, National Institute of Science and Technology, India, 2011-2014.
- Junior Research Fellow, Department of Computer Science and Engineering, Jadavpur University, India, 2014-2015.
- Assistant Professor, Department of Computer Science, New Alipore College, India, 2020-present.

Teaching:

- Theory of Computation
- Operating System

- Digital Image Processing
- Computer Graphics
- Computational Intelligence
- Programming using Python
- Computational Mathematics
- Data Structure using C
- Programming in C

Recent Publications List (Last 5 years):

Journals:

- **S. Pramanik**, D. Bhattacharjee, M.Nasipuri, & O. Krejcar, "LINPE-BL: A Local Descriptor and Broad Learning for Identification of Abnormal Breast Thermograms."*IEEE Transactions on Medical Imaging*, vol. 40, pp. 3919-3931, 2021, DOI: 10.1109/TMI.2021.3101453 2021. ISSN: Print-0278-0062, Electronic-1558-254X. (**IF: 11.037**).
- A. Kar, **S. Pramanik**, A. Chakraborty, D. Bhattacharjee, E. S. L. Ho, H. P. H. Shum, "LMZMPM: Local Modified Zernike Moment Per-unit Mass for Robust Human Face Recognition," *IEEE Transactions on Information Forensics and Security*, vol. 16, pp. 495-509, 2020, DOI: 10.1109/TIFS.2020.3015552. ISSN: Print- 1556-6013, Electronic- 1556-602. (**IF: 7.231**).
- **S. Pramanik**, S. Ghosh, D. Bhattacharjee, M. Nasipuri, "Segmentation of Breast-region in Breast Thermogram using Arc-approximation and Triangular-space Search (BATS)*,*" *IEEE Transactions on Instrumentation and Measurement*, vol.69, no. 7, pp. 4785-4795.DOI: 10.1109/TIM.2019.2956362. ISSN: Print-0018-9456, Electronic: 1557-9662. (**IF: 5.332**).
- **S. Pramanik**, D. Bhattacharjee, M. Nasipuri, "*MSPSF: A Multi-scale Local Intensity Measurement Function for Segmentation of Breast Thermogram,*" *IEEE Transactions on Instrumentation and Measurement,* vol. 69, no. 6, pp. 2722-2733. DOI: 10.1109/TIM.2019.2925879. ISSN: Print-0018-9456, Electronic-1557-9662. (**IF: 5.332**).
- **S. Pramanik**, D. Banik, D. Bhattacharjee, M. Nasipuri, M. K. Bhowmik, G. Majumdar, "Suspicious-region segmentation from breast thermogram using DLPE-based level set method," *IEEE Transactions on Medical Imaging*, vol. 38, no. 2, pp. 572-584. DOI: 10.1109/TMI.2018.2867620. ISSN: Print-0278-0062, Electronic-1558-254X. (**IF: 11.037**).
- **S. Pramanik**, D. Bhattacharjee, M. Nasipuri, "*Breast abnormality detection using combined texture and vascular features*," *Int. J. of Computational Science and Engineering*, vol. 18, no. 2, 2019, pp. 140-153. DOI: 10.1504/IJCSE.2019.10019159 (**UGC listed, DBLP, Scopus Indexing**). ISSN: Print-1742-7185, Electronic-1742-7193.

Book Chapter:

- **S. Pramanik**, D. Banik, D. Bhattacharjee, M. Nasipuri, "*A computer-aided hybrid framework for early diagnosis of breast cancer*," ACSS 2018, Advanced Computing and Systems for Security, Springer Verlag, Singapore, Vol. 8, pp. 111-124. (**Web of Science, DBLP, Scopus indexing**). ISSN: 978-981-13-3701-7
- **S. Pramanik**, D. Banik, D. Bhattacharjee, M. Nasipuri, M. K. Bhowmik, "*Breast blood perfusion (BBP) model and its application in differentiation of malignant and benign breast*," Advanced

Computational and Communication Paradigms, Springer, Singapore, 2018, pp. 406-0413. ISSN: 978-981-10-8239-9

Conference:

- **S. Pramanik**, D. Bhattacharjee, & M. Nasipuri, "Breast Abnormality Detection Using Texture Feature Extracted by Difference-Based Variable-Size Local Filter (DVLF)," In *Proceedings of Research and Applications in Artificial Intelligence* (pp. 111-120). Springer, Singapore, 2021.
- D. Banik, **S. Pramanik**, D. Bhattacharjee, M. Nasipuri, M. K. Bhowmik, "*Breast Cancer Detection using Thermal Breast Image: A Survey,*" Proc. in National Conference on Recent Trends in Engineering and Technology, 2017.
- **S. Pramanik**, D. Bhattacharjee, and M. Nasipuri, "*Multi-resolution analysis to differentiate the healthy and unhealthy breast using breast thermogram,*" In IEEE International Conference on Systems in Medicine and Biology (ICSMB-2016), 2016, pp. 49-52.
- **S. Pramanik**, D. Bhattacharjee, and M. Nasipuri, "*Texture analysis of breast thermogram for differentiation of malignant and benign breast,*" In IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI-2016)*, 2016,* pp. 8-14. (**DBLP, Web of Science, Scopus Indexing**) (**Best Paper Awarded**)

Awards (If any):

- WBCSC-UGC-SET Qualified, WBCSC-UGC, 2018
- UGC-NET Qualified, UGC, 2018
- GATE MHRD Fellowship in ME, MHRD, 2009-2011
- Visvesvaraya PhD Fellowship, MeitY, Govt. of India, 2015-2020
- 1st Position in the Fetal Ultrasound Censor (FUC)Grand Challenge, IIT Kharagpur, 2018
- Best Paper Award, ICACCI-2016, 2016

Professional Membership (If any):