



Curriculum Vitæ

Abhirup Banerjee

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Name: Abhirup Banerjee
Date of Birth: 8th August, 1988
Permanent Address: 267/1, Gopal Lal Thakur Road, P.O. & P.S.: Baranagar, Kolkata – 700 036, India
Status: Submitted Ph.D. Thesis in Computer Science
Areas of Interest: Biomedical Image Analysis, Computer Vision, Statistical Pattern Recognition, Image Processing, Machine Learning, and Bioinformatics

Educational Qualifications:

Examination	Institution	Year	Specialization	Marks (%)	Division
Master of Statistics	Indian Statistical Institute Kolkata	2009-2011	Statistics	82.05	1st
Bachelor of Science	St. Xaviers College Kolkata (Autonomous), under Calcutta University	2006-2009	Statistics (Honours), Mathematics, Computer Science	78.70	1st
Higher Secondary	West Bengal Council of Higher Secondary Education	2004-2006	Physics, Chemistry, Mathematics, Statistics	91.80	1st
Secondary	West Bengal Board of Secondary Education	2002-2004	Mathematics, Physical Science, Life Science, Chemistry	87.50	1st

Courses/ Seminars/ Workshops:

- Participated in “Medical Imaging Summer School 2014” held at Favignana, Sicily, Italy, during 28 July-1 August 2014.
- Participated in “School on Large Scale Problems in Machine Learning and Workshop on Common Concepts in Machine Learning and Statistical Physics” held at Adriatico Guest House, Kastler Lecture Hall, ICTP, Trieste, Italy, during 20-31 August 2012.

- Organized a 3-day Workshop on “Text Mining” during January 2014 in ISI Kolkata, as a member of ACM Student Chapter, ISI Kolkata.
- Organized a 3-day Workshop on “Machine Learning” during October 2012 in ISI Kolkata, as a member of ACM Student Chapter, ISI Kolkata.

Computer Skills:

- Programming Languages: C, C++, Python, HTML, JavaScript
- Software: Matlab, R, MS Excel, LaTeX
- OS Environments: Linux (Ubuntu, Fedora, Redhat); Windows 8,7, Vista, XP

Academic Achievements:

- Received ISCA Young Scientist Award from the Indian Science Congress Association in the Section of Information and Communication Science & Technology (including Computer Sciences) in the year 2016-2017.
- Received 2nd Prize for the paper entitled “Bias Field Correction in MR Images Using Rough Sets and Contraharmonic Mean” in the 4th IDRBT Doctoral Colloquium, 2014.
- Received Graduate Student Support by GOOGLE Inc. and ICIAP2013 Committee for attending and presenting paper in the 17th International Conference on Image Analysis and Processing (ICIAP 2013), held in Naples, Italy on September 2013.
- Qualified the ISI Entrance Test 2011 for Junior Research Fellowship in Computer Science, conducted by the Indian Statistical Institute, Kolkata, India in June 2011.
- Secured an All India Rank 15 in the CSIR-NET Examination in Mathematical Sciences held on December, 2010.
- Qualified the ISI Entrance Test 2009 for Master of Statistics (M.Stat.), conducted by the Indian Statistical Institute, Kolkata, India in June 2009.

Some Relevant Courses Attended (during PhD):

Data and File Structures, Computer Organization, Pattern Recognition and Image Processing, Advanced Image Processing, Design and Analysis of algorithms of the M. Tech. (CS) curriculum.

List of Publications:

Articles in referred Journals:

- **Abhirup Banerjee** and Pradipta Maji, “Rough Sets for Bias Field Correction in MR Images Using Contraharmonic Mean and Quantitative Index”, *IEEE Transactions on Medical Imaging*, 32(11), pp. 2144--2155, November 2013.
- **Abhirup Banerjee** and Pradipta Maji, “Rough Sets and Stomped Normal Distribution for Simultaneous Segmentation and Bias Field Correction in Brain MR Images”, *IEEE Transactions on Image Processing*, 24(12), pp. 5764--5776, December 2015.
- **Abhirup Banerjee** and Pradipta Maji, “Rough-Probabilistic Clustering and Hidden Markov Random Field Model for Segmentation of HEp-2 Cell and Brain MR Images”, *Applied Soft Computing*, 46, pp. 558--576, September 2016.

- **Abhirup Banerjee** and Pradipta Maji, “Spatially Constrained Student’s t -Distribution Based Mixture Model for Robust Image Segmentation”, *Journal of Mathematical Imaging and Vision (Under Revision)*, 2016.
- **Abhirup Banerjee** and Pradipta Maji, “Stomped- t : A Novel Probability Distribution for Rough-Probabilistic Clustering”, *Information Sciences (Under Revision)*, 2016.

Articles in Conference Proceedings:

- **Abhirup Banerjee** and Pradipta Maji, “Contraharmonic Mean Based Bias Field Correction in MR Images”, *Proceedings of 15th International Conference on Computer Analysis of Images and Patterns (CAIP 2013)*, York, UK, pp. 523--530, August 2013.
- **Abhirup Banerjee** and Pradipta Maji, “Rough Set Based Homogeneous Unsharp Masking for Bias Field Correction in MRI”, *Proceedings of 17th International Conference on Image Analysis and Processing (ICIAP 2013)*, Naples, Italy, pp. 542--551, September 2013.
- **Abhirup Banerjee** and Pradipta Maji, “Rough Sets for Finite Mixture Model Based HEP-2 Cell Segmentation”, *Proceedings of 10th International Conference on Rough Sets and Knowledge Technology (RSKT 2015)*, Tianjin, China , pp. 459--469, November 2015.

Refereeing Activities:

- Reviewer for the journals: IEEE Transactions on Systems, Man, and Cybernetics: Systems, IEEE Journal of Biomedical and Health Informatics, Pattern Recognition, Applied Soft Computing, IET Computer Vision.
- Reviewer for the conferences: PReMI 2013 (Kolkata, India), ICAPR 2015 (Kolkata, India), PReMI 2015 (Warsaw, Poland), IJCRS 2015 (Tianjin,China), CVIP 2016 (Roorkee, India).

Personal Information:

- Nationality: Indian
- Marital Status: Unmarried
- Language Proficiency: English, Bengali, Hindi

References:

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