

Oishila Bandyopadhyay

DESIGNATION & AFFILIATION

Assistant Professor
Department of Computer Science & Engineering
Indian Institute of Information Technology
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EDUCATION

- | | |
|---|------|
| Ph.D | 2016 |
| <i>Indian Institute of Engineering Science and Technology (IEST), Shibpur, West Bengal, India</i> | |
| Thesis title: Automated Analysis of Orthopaedic X-ray Images based on Digital-Geometric Techniques | |
| Supervisors: Dr. Arindam Biswas and Prof. Bhargab B. Bhattacharya | |
| M.E | 2008 |
| <i>West Bengal University of Technology</i>
Computer Science & Engineering | |
| B.Tech | 1998 |
| <i>University of Calcutta</i>
Computer Science & Engineering | |
| B.SC | 1995 |
| <i>University of Calcutta, Scottish Church College, Kolkata</i>
Physics (Hons.) | |
| Higher Secondary | 1992 |
| <i>West Bengal Council for Higher Secondary Education</i>
Serampore Girls High School | |
| Secondary | 1990 |
| <i>West Bengal Board of Secondary Education</i>
Serampore Girls High School | |

PUBLICATIONS

Journals

1. O. Bandyopadhyay, A. Biswas, B. B. Bhattacharya, 'Long-bone Fracture Detection in Digital X-ray Images Based on Digital Geometric Techniques', Computer Methods and Programs in Biomedicine, Elsevier, volume 123, pp. 2-14, 2016.
2. O. Bandyopadhyay, B. Chanda, B. B. Bhattacharya, 'Automatic Segmentation of Bones in X-ray Images based on Entropy Measure', International Journal of Image and Graphics, World Scientific, volume 16 (1), pp. 1650001-1650032, 2016.

3. O. Bandyopadhyay, A. Biswas, B. B. Bhattacharya, 'Classification of Long-Bone Fractures based on Digital-Geometric Analysis of X-ray images', Pattern Recognition and Image Analysis: Advances in Mathematical Theory and Applications, Springer, volume 26(4), pp. 742-757, 2016.
4. O. Bandyopadhyay, A. Biswas, B. B. Bhattacharya, 'Automated analysis of Orthopaedic X-ray images based on Digital-Geometric Techniques', ELCVIA Electronic Letters on Computer Vision and Image Analysis, vol. 15(2), pp. 7-9, 2016.

Conferences

1. S. Mukherjee, O. Bandyopadhyay, A. Biswas, B. B. Bhattacharya, 'Does Rotation Influence the Estimated Contour Length of a Digital Object?', Pattern Recognition and Machine Intelligence (PReMI), 2017 (accepted).
2. S. Mukherjee, O. Bandyopadhyay, A. Biswas, 'Automated Brain Tumor Diagnosis and Severity Analysis from Brain MRI', International Symposium COMPImage, vol. LNCS 10149, pp. 198 – 207, 2016.
3. T. Dutta, N. Dutta, O. Bandyopadhyay, 'Retinal Blood Vessel Segmentation and Bifurcation Point Detection', International Workshop on Combinatorial Image Analysis (IWCIA) , LNCS 9448 , pp. 261-275, 2015.
4. O. Bandyopadhyay, A. Biswas, B. B. Bhattacharya, 'Long-Bone Fracture Detection in Digital X-ray Images based on Concavity Index', International Workshop on Combinatorial Image Analysis (IWCIA) , LNCS 8466, pp. 212-223, 2014.
5. O. Bandyopadhyay, A. Biswas, B. Chanda, B. B. Bhattacharya, 'Bone Contour Tracing in Digital X-ray Images Based on Adaptive Thresholding'. Pattern Recognition and Machine Intelligence (PReMI), LNCS 8251, pp. 465-473, 2013.
6. O. Bandyopadhyay, B. Chanda, B. B. Bhattacharya, 'Entropy-Based Automatic Segmentation of Bones in Digital X-ray Images'. Pattern Recognition and Machine Intelligence (PReMI), LNCS 6744, pp.122-129, 2011.
7. A. Sil, O. Bandyopadhyay, N. Chaki, 'Data Diverse Fault Tolerant Architecture for Component Based Systems' in World Congress on Nature and Biologically Inspired Computing (NaBIC), pp. 942-946, 2009.
8. P. P. Kundu, O. Bandyopadhyay, A. Sinha, 'An Efficient Architecture of RNS Based Wallace Tree Multiplier for DSP Applications', in IEEE Annual Midwest Symposium on Circuits and Systems, pp. 221-224, 2008.

SPONSORED RESEARCH & DEVELOPMENT PROJECT

Title: Automated X-ray Image Analysis using Digital Geometric Approaches

Funding Agency: DST (WOS-A)

Period: July 2015-June 2018

Role: Principal Investigator

Mentor: Prof. B. B. Bhattacharya, ACMU, ISI, Kolkata

TEACHING EXPERIENCE

Faculty

Oct 2017 -
till date

Indian Institute of Information Technology (IIIT), Kalyani
Department of Computer Science & Engineering

Faculty

2016 - 2017

Institute of Engineering and Management (IEM), Kolkata
Department : Computer Science & Engineering
Subjects taught:
Design and Analysis of Algorithms,
Compiler Design,
Graph Theory,
Software Engineering

Faculty & TIC

2010 - 2013

Camellia Institute of Technology, Madhyamgram
Department : Computer Science & Engineering
Subjects taught:
Theory of Automata,
Compiler Design,
Computer Graphics,
Multimedia Technology,
Software Engineering

Faculty (lien vacancy)

2008 - 2010

National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata
Department : Computer Science & Engineering
Subjects taught (M.Tech):
Multimedia Technology,
E-learning
Subjects taught (Short term courses for Engineering teachers):
Java & JSP,
Web Technology and XML,
Software Project Management,
Software Design & Testing

RESEARCH EXPERIENCE

DST Woman Scientist

2014 - 2016

Indian Statistical Institute, Kolkata, India
Principal Investigator of the DST funded project under mentorship of Prof. Bhargab B. Bhattacharya, Advanced Computing and Microelectronics Unit, ISI, Kolkata

INDUSTRY & ADMINISTRATIVE EXPERIENCE

Project Officer

2006 - 2008

West Bengal University of Technology (WBUT), Kolkata
Role : Project officer of EDUSAT project

Responsibility : Installation of Network Operation Center (teaching end) and Satellite Interactive terminals (SITs) in collaboration with ISRO and BEL in all WBUT colleges

Senior Software Engineer

2000 - 2005

SkyTech Solutions Pvt. Ltd., Kolkata

Role : Project leader and Module Coordinator of United Airlines Projects (J2EE platform) on

Manpower Optimization,
Flight Scheduling

Scientific Officer(C)

1999 - 2000

Indira Gandhi Center for Atomic Research (IGCAR), Kalpakkam

Department : Computer Science & Engineering
In-house project on Hospital Management

AREA OF INTEREST

- Medical Image Processing
- Digital Geometry
- Web Technology
- Software Engineering

CONTACT DETAILS

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<i>Mail</i>	oishila@gmail.com