MedImg: Workshop on Medical Imaging Techniques, Post Processing and Clinical Applications (QIP Sponsored)

14th - 16th April, 2017

Organized by

Centre for Biomedical Engineering
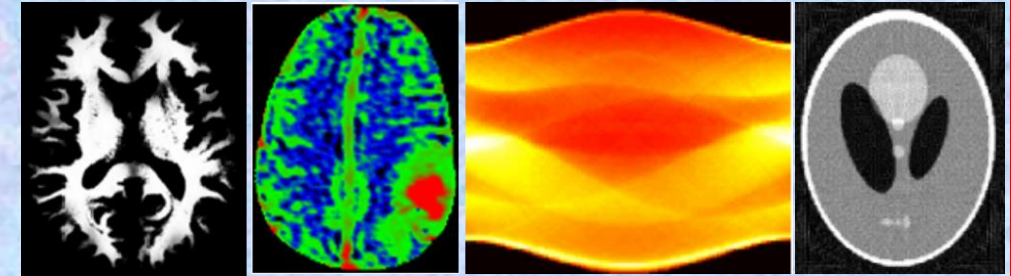**Indian Institute of Technology Delhi**

Venue :

Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110 016 India

Program Objective :
The course is designed for students and faculty members interested in medical imaging and image processing. The course will discuss theoretical aspects of various image processing techniques / methods and provide hands on experience on image processing.

Course Content :
- Overview of medical imaging and clinical application
- Basics of CT and MRI
- Image pre-processing
- Image segmentation and registration
- Advance MRI techniques
- Quantitative medical image analysis
- Image reconstruction
- Hospital visit

Schedule :
Day – 1 (14th April 2017)
Breakfast & Tea
- Inauguration
- Introduction to Medical Imaging
- Overview of Human Anatomy and Physiology
- Basics (Physics, Instrumentation, Safety etc.) of Magnetic Resonance Imaging
Lunch break
- Basics (Physics, Instrumentation, Safety etc.) of CT Imaging
- Reconstruction and Post processing in Imaging

Day – 2 (15th April 2017)
Breakfast & Tea
- Clinical CT / MRI
- Technicalities of Medical Imaging
- Clinical Applications and Advances
Lunch break
- Site Visit (MRI/CT facility)

Day – 3 (16th April 2017)
Breakfast & Tea
- Machine Learning in Image Processing
- Functional MRI (fMRI), Perfusion MRI
- Molecular Imaging, Diffusion MRI
- Multi-parametric Imaging
- Experimental Design for Imaging
- Data reading, SNR, CNR, Segmentation and Registration
Lunch break
- Hands on Workshop using ImageJ / MATLAB
- Hands on Workshop using ImageJ / MATLAB
- Closing Ceremony and vote of thanks

Eligibility :

1) Faculty members from technical institutes in Quality Circle of IITD under QIP (http://cepqip.iitd.ac.in) program will be given preference. Boarding and TA will be provided as per rules. No registration fee for QIP Quality Circle institutions faculty.
2) Faculty from other institutes and students interested in medical imaging can also apply. Course fee will be applicable as mentioned here.

Registration :
Registration form is available on
http://medimg.iitd.ac.in/registration
Registration starts: 15th February 2017
Last date of Registration: 25th March

Registration Fee :
Rs. 4,000 for students
Rs. 6,000 for faculty
Rs. 10,000 for industry person

Teaching Faculty :
IIT Delhi Faculty:
Dr. Amit Mehndiratta (CBME, IIT D)
Dr. Anup Singh (CBME, IITD)
Dr.B. K. Panigrahi (EEE, IIT D)
Dr. Kedar B. Khare (Physics, IIT D)
Dr. Rahul Garg, (CSE, IITD)
Faculty From Other Institutions:
Dr. Devasenathipathy K, (AIIMS)
Dr. N.R. Jagannathan , (AIIMS)
Dr. Raju Sharma, (AIIMS)
Dr. Rakesh Kumar Gupta (Fortis)
Dr. Sameer Bakhshi, (AIIMS)
Dr. S. Senthil Kumaran, (AIIMS)
Dr. Sonal Krishan, (Medanta)
Dr. Virendra Kumar, (AIIMS)

Organized by :
CBME, IIT Delhi
Dr. Amit Mehndiratta,
Assistant Professor
Dr. Anup Singh ,
Assistant Professor
Organizing students :
(PhD Research Scholar)
Anirban Sengupta
Ayan Debnath
Dinil Sasi
Esha Baidya
Neha Singh
Rafeek T
Rupsa Bhattacharjee
Sandeep P Jogi
Snekha Sehrawat

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