Medical Imaging :
Techniques & Image Processing Workshop

25th - 27th March, 2016

Organized by

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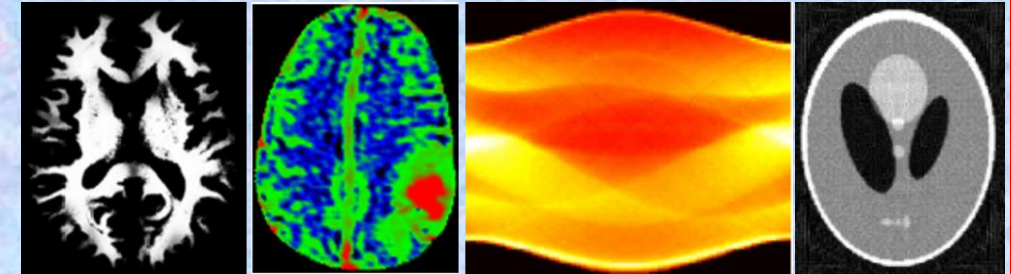### Indian Institute of Technology Delhi

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
- Quantitative medical image analysis
- Image reconstruction
- FMRI and post-processing
- Three hands on training and workshops

Schedule :
Day – 1(25th March)
- Medical imaging research in India
- Current scenario of clinical imaging
- Overview of imaging & human body anatomy
- CT imaging: Physics and Clinical Applications

Lunch break

- MR imaging: Physics and Clinical Applications
- Workshop I: Image processing: Data reading, Segmentation, Registration (Lecture)

Day – 2(26th March)
- Workshop I: Hands on training using ImageJ / MATLAB
- Workshop II: Image Reconstruction & Compressed sensing (Lecture)

Lunch break

- Workshop II: Hands on training on image reconstruction
- Poster and Abstract presentation by participants

Dinner

Day – 3(27th March)
- Workshop III a: Basics of fMRI (Lecture)
- Workshop III a: Hands on training on fMRI analysis using SPM

Lunch break

- Workshop III b: Advanced fMRI & analysis methodologies (Lecture)
- Workshop III b: Hands on training on advanced fMRI methodologies
- Closing ceremony

Eligibility :

1) Faculty members from technical institutes in Quality Circle of IITD under TEQIP-II (http://cepqip.iitd.ac.in) program will be given preference. Boarding and TA will be provided as per rules. No registration fee for TEQIP 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 website.
Website: http://medimg.iitd.ac.in
Registration starts: 1st February 2016
Last date of Abstract submission: 6th March, 2016
Last date of Registration: 10th March, 2016

Registration Fee :
Rs. 3,000 for students
Rs. 6,000 for faculty & others

Teaching Faculty :

IIT Delhi Faculty:
Dr. Amit Mehndiratta (CBME, IIT D)
Dr. Anup Singh (CBME, IITD)
Dr. Kedar B. Khare (Physics, IIT D)
Dr. Rahul Garg (CSE, IIT D)
Dr. Tapan Gandhi (Electrical, IIT D)
Faculty From Other Institutions:
Dr. N.R. Jagannathan (NMR, AIIMS)
Dr. Rakesh Kumar Gupta (Fortis, FMRI, Gurgaon)

Organized by :
Centre for Biomedical Engineering, IIT Delhi :

Dr. Amit Mehndiratta,
Assistant Professor
Dr. Anup Singh ,
Assistant Professor

Organizing students :
(PhD Research Scholar)
- Anirban Sengupta
- Ayan Debnath
- Esha Baidya
- Snekha Sehrawat

Contact Details :

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