List of Speakers

1). Prof. Jayanta Mukherjee, IIT-Kharagpur (Confirmed)
2). Prof. D. K. Pratihar, IIT-Kharagpur (Confirmed)
3). Prof. Subhasis Bhaumik, IIEST,Shibpur (Confirmed)
4). Dr. Deepak Joshi, IIT Delhi (Confirmed)
5). Dr. Neelesh Kumar, CSIR-CSIO, Chandigarh (Confirmed)
6). Dr. Pavan Chakraborty, IIIT-Allahabad (Confirmed)
7). Dr. Prasanna Lenka, NIOH-Kolkata (Confirmed)
8). Prof. A. Thirugnanam, NIT-Rourkela
9) Dr. Pankaj Kumar Sa, NIT-Rourkela
10) Dr. Bidyut Kumar Patra, NIT-Rourkela
11). Dr. Anup Nandy, NIT-Rourkela
12). Dr. Trisha Keshar, Emory University, USA (On Skype)
13) Dr. Gentiane Venture, TUAT, Japan (On Skype)
14) Dr. Shuping Xiong, KAIST, South Korea (On Skype)

Organizing Committee

Chairman: Prof. D. P. Mohapatra, NIT-Rourkela.
Convener: Dr. Anup Nandy, NIT-Rourkela.
Contact No: 8763721281 (M)
Email: **nandya@nitrkl.ac.in**
Co-Convener: Dr. Bidyut Kr. Patra, NIT-Rourkela.
Treasurer: Dr. Korra Sathya Babu, NIT-Rourkela.

Registration Fee and Accommodation

Industry/Research Organization :Rs. 5000/
Faculty (Academics Institute) : Rs. 3000/
Students and Research Scholars :Rs. 2000/

Limited shared accommodations are available at Institute's guest house on payment basis. Registration fee includes registration kit, workshop materials etc. Fooding will be available in the Institute Guest House and Hostel on payment basis.

Registration Form

Name: _____
Designation:_____
Organization:_____
Qualification:_____
Address for Correspondence:

_____

_____

Mobile No: _____
Email Id: _____
Gender: _____
Accommodation Required: (Y/N?) _____
Registration Fee: _____
DD No. and Date:_____
Bank: _____
City: _____

Date: Signature of Applicant

Place:

All payments shall be made through Demand draft/ Cheque drawn in favor of "CONFERENCE, NIT Rourkela" payable at SBI, NIT Branch, Rourkela (Code: 2109). DDs and Registration form must reach to **Convener, Dr. Anup Nandy**, Assistant Professor, Department of Computer Science & Engineering, National Institute of Technology Rourkela, Rourkela-769008, Odisha, India on or before **August 16, 2017.**

Indian Council of Medical Research Sponsored National Workshop

On

Motion Understanding for Medical Applications

MUMApp-2017

August 25 to August 29, 2017

Organized by

Department of Computer Science and Engineering
National Institute of Technology Rourkela

www.nitrkl.ac.in

About the Workshop

This workshop will focus on recent advances in human motion analysis and will highlight an application to medical fields. The purpose of this workshop is to discuss bio-mechanics and advanced computational techniques for understanding and modeling of human motion for detection of neuro-musculo-skeletal diseases. The scientists, engineers, and researchers who are working in this area, will be benefited to know about the recent methods of human motion modeling and their dynamic simulations. This workshop will explore various applications in areas such as medical disorder diagnosis, orthopedic and rehabilitation etc. The scope of the workshop is listed below:

- Understanding the human movement.
- Analysis of vision-based and sensor-based motion patterns.
- Learning/dimensionality reduction techniques in human motion.
- Musculo-Skeletal modeling of human motion and their dynamic simulation
- Classification methods for human motion identification.

Who Can Attend

Students (including post graduate and research scholars), Faculties from different disciplines such as computer science, biomechanics, Medicine, biomedical engineering and additionally from industry and healthcare to come out with recent advances in human motion understanding and their applications to healthcare.

Course Contents

This workshop is intended to cover the following topics:

- Introduction to Bio-mechanics.
- Computational methods for human movement analysis.
- Different challenges and opportunities for healthcare application through motion analysis.
- Different modes of motion analysis techniques.
- Methods for movement stability analysis.
- Techniques for human movement modeling and their dynamics simulations.
- Brief introduction on different types of bio-mechanical diseases for healthcare applications: such as
    a) Gait rehabilitation.
    b) Clinical analysis on orthopedic gait.
    c) Diagnosis of medical disorder.
- Machine learning techniques for motion classification.

About NIT-Rourkela

NIT Rourkela is one of the premier national level institutions for technical education in the country and is funded by the Government of India. The main objective of the Institute is to produce quality Engineers and Scientists in Graduate and Post-Graduate levels in various branches of Engineering and Science. According to the Times Higher Education (THE) ranking of the World's best Universities 2017, it is ranked in top 800 institutes of world, and it is only NIT to feature in the list. According to the QS University ranking: BRICS 2016 has figured NIT Rourkela in the list of 111-120 top universities in Brazil, Russia, India, China and South Africa.

About Department

The Department of Computer Science and Engineering was established in the year 1983 with the recent technological advancements in Computer Science. The department has currently 19 faculty members with different research and teaching expertise in the field of Computer Science. The Department offers B.Tech and B.Tech Dual degree in CSE. The department also offers M.Tech in four specializations (CSE, Information Security, Software Engineering, and Data Analytics). The department offers Ph.D in CSE with full time research scholars. The department runs several sponsored projects from government organizations like DST, SERB, BRNS, etc.

About Location

NIT-Rourkela is well connected by Rail. This institute is located at a distance of about 7 KMs from Rourkela Railway Station in Odisha State. Rourkela station is well connected by Kolkata, Chennai and Mumbai and Bhubaneswar.