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.

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 motion analysis.
- Different challenges and opportunities for healthcare application through motion analysis.
- Different modes of motion analysis techniques.
- Methods for motion 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.

List of Speakers

1. Prof. Jayanta Mukherjee, IIT-Kharagpur
2. Prof. D. K. Pratihar, IIT-Kharagpur
3. Prof. Subhasis Bhattacharyya, IITEST, Shibpur
4. Dr. Deepak Joshi, IIT Delhi
5. Dr. Neelkanth Kumar, CSIR-CIOT, Chandigarh
6. Dr. Pavan Chakraborty, IIT Allahabad
7. Dr. Prasanna Lanka, NIOH-Kolkata
8. Dr. Sajib Chakraborty, MBBS, MD (Anatomy), West Bengal Medical Education Service, Assistant Secretary
9. Dr. A. Thirunavukkarasu, NIT-Rourkela
10. Dr. Pankaj Kumar Sar, NIT-Rourkela
11. Dr. Bidyut Kumar Patra, NIT-Rourkela
12. Dr. Korra Sathyababu, NIT-Rourkela
13. Dr. Anup Nandy, NIT-Rourkela
14. Dr. Trisha Keshar, Emory University, USA (On Skype)
15. Dr. Gourjyoti Roy, TUAT, Japan (On Skype)

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. 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 or on or before August 24, 2017. Registration form can be downloaded from the link given below:

https://nitrkl.ac.in/websitenew/docs/Workshop/C3360262017154105398.pdf