**DOCS’2022-Special Session Proposal**

**“Data-driven Human Motion Analytics”**

Human motion analytics has been applied to many real-world applications, such as driver monitoring, video surveillance, assembly worker inspection, Autism screening and intervention, etc. This special session aims to promote the development of the human motion analytics using data-driven based techniques (e.g., deep learning or reinforcement learning). With rapid advances of high-performance computing at low cost, data-driven based techniques have made great progress in human detection, pose estimation and behavior recognition, which can improve the human-centered decisions and interactions in the intelligent systems. This special session brings together experts in machine learning, computer vision, behavior data science to foster a fruitful and multi-disciplinary discussion. It will present the latest results and emerging learning and algorithmic techniques, which allows top researchers from different communities to share their works. We aim to inspire cross-discipline collaboration and motivate the use of integrated research approaches for human motion analytics.

**Topics**

Topics of interest include but are not limited to:

* Data acquisitions and representations
* Scene analysis and understanding
* Object detection and tracking
* Face detection and tracking
* Pose estimation and analysis
* Gaze estimation and tracking
* Action detection or segmentation
* Abnormal behavior detection and analysis
* Human-machine interaction
* Multi-sensor, multi-modal or multi-view data fusion for human analysis
* Related applications

**Important Dates**

Paper submission: March 1, 2022

Notification of acceptance: April 1, 2022

Camera-ready copy and author registration: May 1, 2022

**Organizers**

**Weihong Ren (**[renweihong@hit.edu.cn](mailto:renweihong@hit.edu.cn)**),** Harbin Institute of Technology, Shenzhen, China.

**Jing Li** ([jing.li.2003@gmail.com](mailto:jing.li.2003@gmail.com)), Tianjin University of Technology, China.