

## SP<sup>2</sup>S 2016

### Special Session on Smart Pattern Processing for Sports (SP<sup>2</sup>S)

at the 8th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2016)

Da Nang, Vietnam, March 14-16, 2016

Conference website: <http://www.aciids.pwr.edu.pl/>

#### Special Session Organizers

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#### Objectives and topics

Pattern identification, processing and recognition in sports are vital for athletes' performance analysis, injury prevention and rehabilitation. In recent years, wearable technologies have evolved in order to allow smart pattern processing in actual competitions than in laboratory environment. The complexity of different sports actions leads feature extraction using acquired data from wearable devices challenging and time consuming. Thus, intelligent algorithms have found promising for data integration and fusion for the formation of appropriate pattern sets. The SP<sup>2</sup>S 2016 Special Session at the 8th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2016) is devoted to the pattern identification, processing and recognition methods addressing classification, prediction, and clustering of complex sports activities. We want to offer an opportunity for researchers and practitioners to identify novel promising research directions as well as to publish recent advances in this area. The scope of the SP<sup>2</sup>S 2016 includes, but is not limited to the following topics:

- Intelligent frameworks for sports performance analysis, injury prevention and rehabilitation
- Wearable technologies for feature extraction in different sports
- Pattern identification, processing and recognition for clustering of different sports.
- Knowledge base formation for different sports using smart pattern processing
- Feature extraction and feature selection for human motion modelling
- Real time pattern recognition in sports
- 3D human movement modelling for sports
- Pattern clustering for sports performance analysis
- Incremental and evolving learning of athletes' movement patterns
- Intelligent sports assistive tools and devices
- Bio-inspired robotics devices for sports
- Case based reasoning for athletes' pattern repairs
- Intelligent rehabilitation devices for ligament pattern reconstruction
- Sports pattern reconstruction using motion capture systems
- Smart foot pattern reconstruction for sportswear design

- The influence of brain patterns for different sports

## Important dates

Submission of papers: **15 October 2015**  
Notification of acceptance: **15 November 2015**  
Camera-ready papers: **1 December 2015**  
Registration & payment: **1 December 2015**  
Conference date: **14-16 March 2016**

## Program Committee (to be invited)

Minoru Sasaki, Gifu University, Japan  
Michael Yu Wang, National University of Singapore, Singapore  
Eran Edirisinghe, Loughborough University, UK  
Ajith Abraham, MIR Labs, USA  
James F. Peters, University of Manitoba, Canada  
Sergio Velastin, Kingston University, UK  
Tadashi Ishihara, Fukushima University, Japan  
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Aaron Leung, The Hong Kong Polytechnic University, Hong Kong  
Toshiyo Tamura, Osaka Electro-Communication University, Japan  
T. Nandha Kumar, University of Nottingham, Malaysia  
James Goh Cho Hong, National University Singapore, Singapore  
Tsuyoshi Takagi, Kyushu University, Japan  
William C. Rose, University of Delaware, USA

## Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: ***SP<sup>2</sup>S 2016: Special Session on Smart Pattern Processing for Sports.***

<https://www.easychair.org/conferences/?conf=aciids2016>

Authors are invited to submit original previously unpublished research papers written in English, of up to 10 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at Springer's web site. Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the EAML 2016 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.).