### ICABIOT-2024

## Special Session: AI Technology in Sports Coaching and Physical Performance

**Time**: 17:00 – 20:00

Venue: Jockey Club Kitchee Centre, Shek Mun, Shatin

- Details: (i) Technical Visit to Kitchee Centre
  - (ii) Keynote Speech: AI Technology in Sports Coaching and Physical Performance, Speaker Dr Kam-Ming MOK
  - (iii) Semi-buffet, and
  - (iv) One-way Shuttle Bus from HKMU to Kitchee Centre

### Jockey Club Kitchee Centre

Creating lifelong positive values and hope in Hong Kong society is the aim of "Sports for Hope", one of The Hong Kong Jockey Club Charities Trust's three areas of strategic focus. Under this banner, the sport of football reached another milestone with the opening of the Jockey Club Kitchee Centre in Shek Mun, Sha Tin. Funded by a HK\$63 million donation in 2012 from the Trust, the new facility will not only develop future generations of top Hong Kong players, but will also strengthen ties within the community as it builds strength of character among young players and teaches them valuable lessons about leadership and teamwork.

With an area of 15,000 square metres, the Centre includes a multi-purpose artificial turf and five single-storey amenities blocks with changing rooms, medical room and office space. The pitches can be arranged into three different configurations for different training purposes. Apart from enabling Kitchee to expand its free youth training programmes for children from the age of five, the facilities will be open to the public for 30 percent of the Centre's sessions. Altogether, more than 100,000 people are expected to use the Centre each year.



# ICABIOT-2024

# 21.06.2024 (Friday)

# **Keynote Speech:**

Al Technology in Sports Coaching and Physical Performance



## Dr Kam-Ming MOK

Senior Lecturer, Lingnan University Vice-President, Sports Medicine and Sports Science Association of Hong Kong, China

### Abstract

This presentation explores the transformative role of Artificial Intelligence (AI) technology in sports coaching and physical performance. As AI continues to evolve, it is revolutionizing the sports industry, offering unprecedented opportunities for enhancing coaching methodologies and athletes' performance. The presentation will delve into the various applications of AI in sports, including data analysis for performance optimization, injury prediction and prevention, and personalized training programs. Real-world examples of AI in sports, such as AI-powered wearable devices and virtual reality training platforms, will be discussed to illustrate its practical applications. Furthermore, AI can tailor training programs to individual athletes, considering their unique strengths, weaknesses, and goals. We will also address the challenges and ethical considerations associated with the use of AI in sports. The presentation aims to provide a comprehensive understanding of the potential of AI technology in revolutionizing sports coaching and physical performance, paving the way for future research and development in this exciting field.

### Biography:

Dr. Kam-Ming Mok is currently a Senior Lecturer at the School of Interdisciplinary Studies, Lingnan University. He is a Mechanical Engineer by training and his research interests are Sports Motion Analysis and Injury Prevention. He published over 30 articles in peer-reviewed international Sports Science journals, and contributed to 4 book chapters in the field of Sport Injury Biomechanics and Motion Analysis. He is currently a Co-Op member of the Asian Federation of Sports Medicine and a committee member of the IEEE-EMBS Hong Kong & Macau Chapter



