

Time	Sep 26 (Friday)	
8:30 AM	Registration Desk Open	
9:00 AM	Introduction to ISACE (by Prof. Dong & Chairs)	
9:20 AM	<u>Keynote 1 (AI, 30 + 10 min)</u> Topic: Foot-Type Robot Technology and Development for Ice and Snow Sports (冰雪运动的足式机器人技术与发展) Speaker: Professor Yue Gao , School of Electronic Information and Electrical Engineering, Shanghai Jiao Tong University, China.	
10:00 AM	<u>Research Track Session 1: Predictive Modeling (3 * 15 min = 45min)</u> Session Chair: Jing Sun 3903: Pasindu Ranasinghe and Pamudu Ranasinghe. Predicting Penalty Kick Direction Using Multi-Modal Deep Learning with Pose-Guided Attention 893: Leili Javadpour, Ashwinth Reddy Kondapalli, Mehdi Khazaeli and Adam Reeves. Does Wellness Predict Performance? Player-Specific Insights from Daily Monitoring in College Men's Soccer 3916: Denis Rize, Paulo Saldanha and Robert Moskovitch. A Bayesian Dual-Skill Framework for Roster-Based Cycling Race Outcome Prediction	Tool & poster Exhibition
10:45 AM	Morning Tea Break (30min)	
11:15 AM	<u>Research Track Session 2: Data Analytics (3 * 15min = 45min)</u> Session Chair: Yun Lin 298: Henry Wang, Md Sirajus Salekin, Jake Lee, Ross Claytor, Shinan Zhang and Michael Chi. Agentic Generative AI for Media Content Discovery at the National Football League 2881: Srishti Sharma, Vishal Barot, Srikrishnan Divakaran, Tolga Kaya, Christopher Taber and Mehul Raval. A Data-driven Imputation Scheme for Cohort Studies: A Collegiate Basketball Case Study 6941: Yun-hwan Lee, Yeong-hun Kwon, Jin-i Hong, Jongsung Kim and Jongbae Kim. An Analysis of Differences in Golf Performance between Age Groups for the Development of an XR Metaverse Platform and Content for Inclusive Digital Leisure	Tool & poster Exhibition
12:00 PM	Lunch (60min)	
1:00 PM	<u>Keynote 2 (Sports, 30 + 10 min)</u> Speaker: Professor Yu Liu , Dean of the School of Sport Science, Shanghai University of Sport, China.	
1:40 PM	<u>Research Track Session 3: Image and Video Processing (5 * 15 min = 75 min)</u> Session Chair: Zhaoyu Liu 2747: Yuto Kase, Kai Ishibe, Ryoma Yasuda, Yudai Washida and Sakiko Hashimoto. Locating Tennis Ball Impact on the Racket in Real Time Using an Event Camera 3149: Winter Clincemallie, Jelle Vanhaeverbeke, Maarten Slembrouck and Steven Verstockt. One-shot Team Recognition and 3D Pose Estimation of Cyclists for Augmented Reality Visualization 5201: Luca Francesco Rossi, Andrea Sanna, Federico Manuri and Mattia Donna Bianco. Horse ReIDing: Addressing Re-Identification in Horse Racing Scenarios 9489: Gerhardt Breytenbach and Jacomine Grobler. YOCO-Sport: An end-to-end framework for deep learning-based camera calibration from sports broadcast footage 7635: Dhairya Shah, Christopher Taber, Tolga Kaya, Eva Maddox and Mehul S Raval. Barbell Trajectory Tracking for Performance Analysis During Snatch Movement in Weightlifting	Tool & poster Exhibition
2:55 PM	Afternoon Tea Break and Awards Announcement (30min)	

Sep 27 (Saturday)		
Registration Desk Open		
<u>Keynote 3 (Sports, 30 + 10 min)</u> Title: Longitudinal biopsychosocial markers of health and performance in Australian elite athletes Speaker: Professor Divya Mehta , Queensland University of Technology, Australia.		
<u>Research Track Session 4: Wearable and Data Management (3 * 15 min = 45 min)</u> Session Chair: Mehul Raval 3665: Nathan Hur, Jonathan Soulsby, Zixiao Zhao and Jing Sun. Personalised Running Coaching with Next-Generation Wearable Technology 9243: Ruchika Malhotra, Bimlesh Wadhwa, Shweta Meena and Subodh Mor. AI and Data Science in Sports Education 9655: Tao Huang, Zehan Xia, Yangyi Huang, Jiabin Zheng, Jun Lin and Kun Wang. Construction of Sports and Exercise Knowledge Graph		Tool & poster Exhibition
Morning Tea Break (30min)		
<u>Research Track Session 5: Statistical Analysis (3 * 15 min = 45 min)</u> Session Chair: Zhenkai Liang 7392: Luke Wildman, Roland Nemes and Zhe Hou. Probabilistic Action Modeling for Tactical Training in Handball 8994: Miles Pitassi, Evan Iaboni, Fauzan Lodhi and Tim Brecht. Examining the Impact of Traffic on Shot Attempts in Ice Hockey 7418: Nikolay Shmakov. Developing an Analytical Tool to Support the Transfer Decision Making Process in Ice Hockey		Tool & poster Exhibition
Lunch (60min)		
<u>Keynote 4 (AI, 30 + 10 min)</u> Speaker: Professor Vishal Misra , Vice Dean of Computing and Artificial Intelligence, Columbia University, USA.		
<u>Research Track Session 6: Strategy Analytics (5 * 15 min = 75 min)</u> Session Chair: Kan Jiang 176: Zhaoyu Liu and Shenyi Su. Analyzing Basketball Lineups with MDP Using NBA Statistics and Player Tracking Data 2895: Ege Demir, Yusuf H. Şahin and Nazım Kemal Üre. How Do Football Teams Play? A Deep Embedded Clustering Approach to Reveal Playing Styles 8061: Ishara Bandara, Sergiy Shelyag, Sutharshan Rajasegarar, Dan Dwyer, Eun-jin Kim and Maia Angelova. Fractal Analysis of Ball Movement Maps for Team Performance Evaluation in Association Football 394: Zizhen Li, Zhaoyu Liu and Kan Jiang. Scalable Tactical Tennis Insights: Hybridizing Automated Reports and LLM-Powered Analytics 9630: Yuexi Song, Chuanfei Li, Hao Cao, Ling Wu, Huanhuan Zheng and Zhenkai Liang. TANS: A Chess-Inspired Notation System for Strategy Analysis of Tennis Games		Tool & poster Exhibition
Afternoon Tea Break (30min)		

3:25 PM	<p><u>Graduate Student Symposium 1: AI, Data Science, and Smart Systems in Sports (11 * 5 min +30 min Q&A = 85 min)</u></p> <ol style="list-style-type: none"> Jiayuan Rao, Haoning Wu, Zifeng Li, Ya Zhang, Yanfeng Wang and Weidi Xie. Building Soccer AI: From Visual Understanding to Holistic Game Intelligence Yuhan Zhang and Kun Wang. Practical Opportunities, Realistic Challenges, and Promotion Paths in Athlete Selection Driven by Artificial Intelligence Guannan Liu and Wenxi Liu. Large Language Models for Personalized Basketball Training: Towards Trustworthy AI-Driven Coaching Yingyi Shi. Enhancing Gymnastic Training with AI: Real-Time Feedback and Performance Prediction for the "Round-off with 180° Turn to Front Drop" Yaxiang Jia. Development of a virtual-reality eye movements-based system to assess basketball players' decision making Bufan Zhang and Guanlin Zhao. Quantitative Impact of Data Analytics on Football Performance and Strategy Optimization Yaojun Pan, Kun Wang. Predicting High School Girls' Basketball Outcomes from Physical and Technical Differences: An Empirical Comparison of Regression and Machine Learning Qi Cui, Kun Wang. Privacy Protection, Standardization, and Interpretability in Structured Fitness Data: An Analytical Framework Based on Data Governance CHEN Zhi-chun, YANG Ning, LIN Shi-jie. Research on Markerless Analysis Methods for Badminton Technical Movements Li Wang, Haiping Sun, Qi Liu, Qi Sun , Taifu Xie. Application of an Intelligent Athlete State Assessment and Monitoring System Based on Multimodal Data Fusion in Evaluating the Rhythm Stability of Hurdle Runners' Inter-Hurdle Steps Li Wang, Haiping Sun, Qi Liu, Qi Sun, Taifu Xie. Study on the Intelligent Muscle Force Monitoring System Assisting Elite Hurdle Athletes in Personalized Takeoff Point Selection and Muscle Force Precision Improvement 	<p><u>Graduate Student Symposium 2: Exercise, Health, and Clinical Applications (12 * 5 min +30 min Q&A = 90 min)</u></p> <ol style="list-style-type: none"> Deyan Liu, Yuge Tian, Min Liu, and Shangjian Yang. Predicting the risk of sarcopenia in the elderly using interpretable machine learning Qiao He. An Interpretable Machine Learning Model to Identify Sarcopenia among US Non-Elderly via SHAP Xin Tian. Exercise Mitigates Diabetes-Related Cognitive Decline by Suppressing DDX3X-Mediated NLRP3 Inflammasome Activation and Pyroptosis Bin Wang, Renqing Zhao. Aerobic Exercise Attenuates Type 2 Diabetic Liver Injury by Restoring Hepatic Mitochondrial Dynamics with a Comparable Effect from Metformin Jiating Huang. Osteogenic Factors: The Mediating Mechanism of Exercise in Alleviating Depression Haitao Bian, Jianghao Zhan, Jie Qi, Jun Zhang. The YAP-Smad Axis Mediates Exercise-Induced Physiological Cardiac Hypertrophy Haonan Li. Analysis of developing exercise prescription strategy for patients with heterogeneous depression Gui Zichang, Liu Weina. The Role of Astrocyte in the Effects of EMR Exposure and Exercise: Intervention on Depressive Behaviors in Mice Guoguo Zhao, Jian Fu, Yuehao Chen. Impact of Physical Exercise on Psychological Resilience of College Students: An Empirical Study Based on Random Forest Regression Model Jiating Huang. The Impact of a Physical Activity Lifestyle on Sleep Quality in Depressed High School Students: An Empirical Study Jianghao Zhan, Haitao Bian, Jun Zhang, Jie Qi. The Effect of Multi-Component Exercise on Inhibition Control and Working Memory in Highly Restricted Individuals Kaiwen Fu, Yu Zhang, Xiao feng Wang. Association Between Chronotype and Salivary Hormone Responses Post-Exercise in University Students 	<p><u>Graduate Student Symposium 3: Biomechanics, Fatigue, and Performance Optimization (12 * 5 min +30 min Q&A = 90 min)</u></p> <ol style="list-style-type: none"> Rongxuan Zhai, Guoqiang Ma, Mingxin Gong, Wenxin Niu, Lejun Wang. Continuous Fatigue Assessment from Surface EMG Using Deep Learning Model During 30-Second All-Out Cycling in Elite Cyclists Dongxu Wang, Dong Sun, Yaodong Gu. Neuromuscular Control Strategies in Instep Soccer Kicking: The Influence of Skill Level on Muscle Synergy and Foot Velocity Stability MA Xueli, LIANG Leichao, LI He, LV Haoxin. Investigation of the Key Biomechanical Factors in the Acquisition of the Single-Leg Full-Depth Squat Hanlin Xu, Rongxuan Zhai, Hanyu Dai, Lejun Wang. Study on Dynamic Evolution of Lower Limb Muscle Synergy Patterns During Repeated Sprint-Induced Fatigue in Cyclists Using a Deep Learning Attention Mechanism Diwei Chen, Dong Sun and Yaodong Gu. Influence of Midsole Hardness on Running Shoe Suitability in Adolescents with Mild Pes Planus: Insights from Frequency-Domain and Ankle Joint Mechanics Zhang Zeyang, Zheng Bosong, Sun Youping. Towards Injury Risk Prediction: Mental Fatigue Alters Biomechanics Across Step-Stop and Jump-Stop Maneuvers in Basketball Players Yuxuan Deng, Carlos Lago-Peñas, Qinyi Cheng, Xiaofei Xu. Basketball Possession: A Systematic Review Zhichao Ding, Tiangji Lu, Hanwen Chen, Jun Yan. Effects of Mental Fatigue on Table Tennis Serve Placement Anticipation: An fNIRS Study Hu Jiajun. A Systematic Review and Benchmark Framework for Performance Evaluation of Table Tennis Motion Capture Systems Feng Zhang, Yuxin Wang, Wenxi Liu. Comparison of College Students' Heart Rate, Energy Expenditure, Perceived Exertion, and Game Experience During Immersive Virtual Reality and Video-Guided Exercise: A Cross-Sectional Study Ausaf Chaudhary, Qiguan Jin and Sana Mahmood. Gender Differences in Stress Appraisal and Coping Strategies Among Endurance Athletes Hanguo Yang, Weixia Zhang, Tiantian Yin. Inter-brain Synchronization Mechanism in Inter-group Cooperation during Table Tennis Doubles 	<p><u>Student Symposium 4: Youth, Education, and Movement Development (12 * 5 min +30 min Q&A = 90 min)</u></p> <ol style="list-style-type: none"> Bi Yu, Zhao Siman, and Fan Hong. Enabling Data for Physical Learning in School Sports in the Digital Era and the Risk of Disrupting Physicality Wang Zihan, Liu Dongli, Hou Wei, Li He. Individual differences under environmental convergence: a study on the influence of physical health level on the development of gross motor skills in 7-9 year old children Guiming Zhu, Jingchi Wang, Miyu Wang, and Rongbin Yin. The Effects of Physical Exercise with Additional Visual Tasks on Vision and Anxiety in Children Aged 10-11 Years Miyu Wang, Ruijia Wu, Guiming Zhu, Rongbin Yin. Prediction of the impact of taekwondo exercise on changes of children's uncorrected distance visual acuity based on machine learning Xu Dongmiao and Liu Liu. Research on the Development of an Analysis System for Fundamental Movement Skills in Chinese Children—Deep Analysis and Application Based on Manually Assessed Data Dai Hanya. Transcranial Direct Current Stimulation Combined with Instability Resistance Training for Eight Weeks Improves Single-Leg Balance Performance in Healthy Older Adults A Randomized Controlled Trial Jianing Tian. Development of a Process-Oriented Assessment System for Fundamental Movement Skills Huiling Wang, Changjiang Liu, Lin Li. Can Acute Aerobic Exercise Mitigate the Negative Effects of Social Exclusion on Interpersonal Cooperation? An fNIRS Hyperscanning Study Ausaf Chaudhary, Qiguan Jin and Sana Mahmood. Enhancing Athletic Performance: The Synergistic Effects of Interval Training and Mind Exercises Lidong Fang, Hu Lou. The Influencing Factors and Promoting Mechanisms of Proactive Health Behavior Intention: Based on the Health Belief Model and Planned Behavior Theory Fengping Li, Qiaolin Zhang, Dong Sun, Yaodong Gu. Backpack with Double Helical Spring Reduces Lumbar Load in School-Age Children
5:00 PM	Panel Discussion & Close (60min)			
6:30 PM	Dinner			
7:00 PM	Dinner (by invitation, 7pm)			