

# Dong Sun

Researcher, PhD Scholar

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## ACADEMIC EDUCATION

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- 2017/06**      **Master of Education in Human Movement Science (Sport Biomechanics)**  
Title of dissertation: *Biomechanical analysis of lower limbs during soccer related movements with different studded soccer boots*  
Ningbo University, Research Academy of Grand Health, Faculty of Physical Education, China
- 2014/06**      **Bachelor of Education in Human Movement Science (Sports Medicine)**  
Title of dissertation: *Comparison of plantar pressure distribution between different heel heights during incline treadmill walking*  
Sports Science College, Wenzhou Medical University, Wenzhou, China

## PROFESSIONAL CAREER

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- 2017 –**      **Researcher**  
Eötvös Loránd University, Faculty of Informatics; Savaria Institute of Technology
- 2017 –**      **Ph.D scholar**  
Doctoral School of Chemical Engineering and Material Science, Pannon University

## RESEARCH FIELDS

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- **Lower limb biomechanics:** Using VICON system to capture kinematic data (hip, knee and ankle) together with a force platform and pressure measurement system (ground reaction force, pressure distribution/center of pressure).
- **Postural control ability of people:** investigate female balance or stability control with comparative analysis of the center of pressure trajectory and plantar pressure distribution with different high-heeled shoes while standing on a dynamic surface with multidirectional perturbations

## LANGUAGE SKILLS

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- English: Professional working proficiency (B2)
- Chinese: Native (C2)

## SOFTWARE SKILLS

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- Multi-body dynamics: Vicon Nexus software, Visual 3D,
- Others: Origin, Office

## **SCIENTIFIC ACTIVITIES AND MEMBERSHIPS**

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### **Scientific reviewer**

- Physical Activity and Health Journal
- Journal of Medical Imaging and Health Informatics

### **Stipends and their results**

2017: Starts PhD work at the ELTE Campus of Szombathely via inter-state scholarship.

## **PUBLICATIONS**

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### **Peer reviewed journal papers with impact factor:**

1. **Sun, D.**, Gu, Y., Mei, Q., Shao, Y., Sun, J. and Fernandez, J., 2017. Effect of heel heights on female postural control during standing on a dynamic support surface with sinusoidal oscillations. *Journal of motor behavior*, 49(3), pp.281-287. IF: 1.573
2. **Sun, D.**, Mei, Q., Baker, J.S., Jia, X. and Gu, Y., 2017. A Pilot Study of the Effect of Outsole Hardness on Lower Limb Kinematics and Kinetics during Soccer Related Movements. *Journal of human kinetics*, 57(1), pp.17-27. IF: 0.77

### **Peer reviewed journal papers:**

3. **Sun, D.**, Gu, Y., Mei, Q. and Baker, J.S., 2017. Different soccer stud configurations effect on running and cutting movements. *International Journal of Biomedical Engineering and Technology*, 24(1), pp.19-32.
4. **Sun, D.**, Gu, Y.D., Fekete, G. and Fernandez, J., 2016. Effects of Different Soccer Boots on Biomechanical Characteristics of Cutting Movement on Artificial Turf. *Journal of Biomimetics, Biomaterials, and Biomedical Engineering*, 27, p.24.
5. **Sun, D.**, Li, F.L., Zhang, Y., Li, C.F., Lian, W.L. and Gu, Y.D., 2015. Lower Extremity Jogging Mechanics in Young Female with Mild Hallux valgus. In *Journal of Biomimetics, Biomaterials and Biomedical Engineering* (Vol. 22, pp. 37-47). Trans Tech Publications.
6. **Sun, D.**, Gu, Y. and Feng, N., 2014. Comparison of plantar pressure distribution between different heel heights during incline treadmill walking. *International Journal of Biomedical Engineering and Technology*, 16(4), pp.279-292.
7. Li, C., **Sun, D.**, Li, Y., Chang, L. and Lian, W., 2016. Energy consumption character due to different forward position change during jogging movement. *International Journal of Biomedical Engineering and Technology*.
8. Shu, Y., **Sun, D.**, Hu, Q.L., Zhang, Y., Li, J.S. and Gu, Y.D., 2015. Lower Limb Kinetics and Kinematics during Two Different Jumping Methods. In *Journal of Biomimetics, Biomaterials and Biomedical Engineering* (Vol. 22, pp. 29-35). Trans Tech Publications.

### **Conference proceedings:**

1. Gusztáv Fekete, **Sun Dong**, Gongju Liu, Yaodong Gu: Wear propagation in the knee joint during cutting movement in football. *The 4<sup>th</sup> International Science and Football Conference (ISAF 2017)*, pp. 12-13, Ningbo, China, 2017.07.19-24.
2. **Sun Dong**, Gongju Liu, Yaodong Gu, Gusztáv Fekete: Choosing the right soccer shoes with the right studs. *The 4<sup>th</sup> International Science and Football Conference (ISAF 2017)*, pp. 14-15, Ningbo, China, 2017.07.19-24.

3. Gongju Liu, Gusztáv Fekete, **Sun Dong**, Yaodong Gu: Traction behavior of soccer shoe stud designs under different game-relevant loading conditions. *The 4<sup>th</sup> International Science and Football Conference (ISFAFA 2017)*, pp. 66-67, Ningbo, China, 2017.07.19-24.
4. **Sun, D.**, Gu, Y., Ruan, G. and Yang, L., 2016, November. Effects of Different Soccer Stud Configurations on Knee Kinematics and Shoe-Surface Traction of Sidestep Cutting Movement on Natural Grass. In *ISBS-Conference Proceedings Archive* (Vol. 34, No. 1).