

Younguk kim

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PERSONAL DATA

- Birth: 29st Sep, 1987, in Republic of Korea
- Nationality: Korean
- Family Status: Married
- Language: First language Korean, Fluent in English

EDUCATION

Sep. 2019 ~ Present	Samsung Electronics Co. Research Engineer	Seoul, Korea
Mar. 2013 ~ Sep. 2019	Seoul National University <i>Department of Mechanical and Aerospace Engineering</i> Thesis: Motion generation algorithm for human-centered computer aided system Advisor: Prof. Kunwoo Lee <i>Ph.D of Mechanical and Aerospace Engineering</i>	Seoul, Korea
Mar. 2010 ~ Feb. 2016	Seoul National University <i>Department of Mechanical and Aerospace Engineering</i> <i>Bachelor of Mechanical and Aerospace Engineering</i>	Seoul, Korea

RESEARCH INTEREST

- **Biomechanics**
 - ✓ Computational Biomechanics
 - ✓ Musculoskeletal simulation, Gait motion analysis
 - ✓ Motion capture experiment, Electromyography
- **Machine learning**
 - ✓ Deep learning
 - ✓ Neural Network based feature extraction
 - ✓ Reinforcement learning
- **3D Printer**
 - ✓ Optimizing inner and outer structure

PUBLICATIONS (SCI ONLY)

1. **Kim, Younguk**, et al. "A novel approach to predicting human ingress motion using an artificial neural network." *Journal of biomechanics* 84 (2019): 27-35.

2. **Kim, Younguk**, and Kunwoo Lee. "A novel approach to predict ingress/egress discomfort based on human motion and biomechanical analysis." *Applied ergonomics* 75 (2019): 263-271.
3. **Kim, Younguk**, et al. "Similarities and differences between musculoskeletal simulations of OpenSim and AnyBody modeling system." *Journal of Mechanical Science and Technology* 32.12 (2018): 6037-6044.

INTERNATIONAL CONFERENCES

4. **Kim, Younguk**, et al., "Human-product integrated modeling system with CAD system", ACDDE 2014, Jinan, China (2014).
5. **Kim, Younguk**, et al., "Human centered cad system with biomechanical analysis", ISB 2015, Glasgow, England (2014).
6. **Kim, Younguk**, et al., "Muscle property prediction using numerical optimization and neuro-musculoskeletal model", ACDDE 2016, Jeju island, Korea (2016)

DOMESTIC CONFERENCES

1. **Kim, Younguk**, and Kunwoo Lee., "Development of ground reaction force prediction algorithm using OpenSim 3.3", The Society for Computational Design and Engineering Conference, 2018 Summer Meeting, Jeju island, Korea (2018).
2. **Kim, Younguk**, et al., "Subject specific muscle model generation in knee joint using optimization theory and isokinetic experiment", The Society for Computational Design and Engineering Conference, 2016 Winter Meeting, Pyeongchang, Korea (2016).
3. **Kim, Younguk**, et al., "Generate distribution model of cellular phone contact point according to size with single hand usage", The Society of CAD/CAM, 2015 Winter Meeting, Pyeongchang, Korea (2015).
4. **Kim, Younguk**, et al., "Develop metabolic cost evaluation algorithm with human upper body", The Society of CAD/CAM, 2015 Summer Meeting, Youngin, Korea (2015).
5. **Kim, Younguk**, et al., "Generate scaled human model considered Asian body shape", The Society of CAD/CAM, 2014 Winter Meeting, Pyeongchang, Korea (2014).
6. Eun Soo Choi, **Younguk Kim**, and Kunwoo Lee, "Vehicle Ingress and Egress Classification", The Society for Computational Design and Engineering Conference, 2017 Winter Meeting, Pyeongchang, Korea (2017).
7. Eun Soo Choi, **Younguk Kim**, Jeonghwan Lee, Wooseong Choi, Jeongmi Seo and Kunwoo Lee, "Influence of Vehicle Design Parameters During Ingress/Egress on Dirt and Scratch of Interior Materials using Design of Experiments", The Society for Computational Design and Engineering Conference, 2016 Winter Meeting, Pyeongchang, Korea (2016).
8. Jungmi Seo, **Younguk Kim**, Wooseong Choi, Kunwoo Lee1, "Human Model Including Shoes for Musculoskeletal Analysis", The Society for Computational Design and Engineering Conference, 2016 Winter Meeting, Pyeongchang, Korea (2016).
9. Woo-seong Choi, **Younguk Kim**, Jungmi, Seo, and Kunwoo Lee., "Prediction simulation of elderly maximum isometric force using maximum voluntary contraction force", The Society of CAD/CAM, 2016 Winter Meeting, Pyeongchang, Korea (2016).
10. Woo-seong, Choi, **Younguk, Kim**, and Kunwoo, Lee, "The evaluation system of joint strength capabilities in human motions", The Society of CAD/CAM, 2015 Winter Meeting, Pyeongchang, Korea (2015).
11. Woo-seong, Choi, **Younguk, Kim**, and Kunwoo, Lee, "The development of multi-degree of freedom forearm musculo-skeletal model for analyzing muscle activities of upper limb motion", The Society of CAD/CAM, 2015 Summer Meeting, Youngin, Korea (2015).

AWARDS AND HONORS

2018 우수 포스터상, 2018 The Society for Computational Design and Engineering Conference(Summer)