

Huiju Park

Web Bio

Information

Biography

Biographical Statement

Huiju Park is an Assistant Professor in the Department of Fiber Science and Apparel Design at Cornell University. He obtained his Ph.D. at Oklahoma State University with an expertise in functional apparel design. Dr. Park has participated in multiple funded multidisciplinary research projects aiming to improve the mobility and thermal comfort of personal protective clothing system including ballistic body armor and firefighters' bunker gear. He has focused on biomechanic and physiological evaluation of personal protective clothing system and sports apparel by exploring the advantages of the latest human performance simulation and assessment technologies such as motion capture and thermal manikin systems.

His professional career as an athletic apparel & footwear manager at PUMA Korea, endowed him with broad knowledge of commercially available ergonomic design features and technologies to improve mobility, comfort & athletic performance.

His research and creative designs won numerous awards from international conference and design competitions (Oklahoma State University Graduate Research Excellence Award, 2012; Paper of Distinction Award at International Textile and Apparel Association, 2010; Phoenix Award for Oklahoma State University – Outstanding Doctoral Student; 2010, ATEXINC Excellent Marketable Design Award at International Textile and Apparel Association, 2009; Second Place at American Quilter's Society Fashion Design Competition, 2009)

Research Focus:

Thermal protection and comfort of protective clothing and sportswear
Design and evaluation of auxiliary heating/cooling garment
Mobility of protective clothing and injury risk
Footwear design and evaluation
Smart clothing

Teaching

Teaching and Advising Statement

My teaching philosophy is to guide students to contribute to the apparel industry, the community, and society through their profession with knowledge, professional skills, creativity and a sound spirit. With this philosophy, I have designed a

learning environment in which students can incorporate the latest technologies, technical skills and creative design ideas, while understanding the current issues in the field, from both the industry and the consumer perspectives. My teaching has focused on problem-solving design approaches through hands-on learning experiences in various forms, which, I believe, is an effective way of making students become viable candidates in their future careers.

Professional

Research

Current Research Activities

Impact of Garment Design on Human Motion and Comfort

Impact of Firefighters' Boots on Mobility and Comfort

Development Evaluation of Auxiliary Cooling and Heating System for Sportswear and Protective Clothing

Investigation of Sizing System of Active Sportswear

Extension

Education

Education

Ph.D. 2011 - Oklahoma State University, Apparel Design

M.S. 2002 - Yonsei University, Clothing and Textiles

B.S. 1997 - Yonsei University, Clothing and Textiles

Professional Experience

Chief Footwear Merchandiser (2006 - 2007)

TeamSports Product Line Manager (2002 - 2005)

E.LAND Co., Ltd. / Division of PUMA KOREA

Honors and Awards:

2014 Nominated for KON/Alumni Advising Award

College of Human Ecology, Cornell University

2012 Oklahoma State University Graduate Research Excellence Award,
Oklahoma State University, Stillwater, OK

2011 College of Human Science Outstanding Doctoral Student, Oklahoma State University, Stillwater, OK

2010 'Paper of Distinction' Award, Annual Conference of International Textile and Apparel Association, Montreal, Canada

2010 Sarah Douglas Fellowship for Promising Doctoral Student, Annual Conference of International Textile and Apparel Association, Montreal, Canada

2010 Phoenix Award for Oklahoma State University Outstanding Doctoral Student, Oklahoma State University, Stillwater, OK

2010 Marguerite Scruggs Research Enrichment Fellowship, Oklahoma State

University, Stillwater, OK

2009 ATEXINC Excellent Marketable Design Award, Annual Conference and Fiber Art, Design Competition of International Textile and Apparel Association, Bellevue, WA

2009 Second Place Design Award, The 23rd Annual American Quilter's Society & Hobbs Bonded Fibers Fashion show and competition, Paducah, KY

2009 Marguerite Scruggs Research Enrichment Fellowship, Oklahoma State University, Stillwater, OK

2009 Honorable Mention, The National Little Black Dress Competition, Kansas State University, Manhattan, Kansas

Courses

Courses Taught

FSAD1140	Introduction to CAD
FSAD2660	Product Development for Active Sportswear
FSAD4010	Empirical Independent Study
FSAD4030	Teaching Apprenticeship
FSAD3550	Active Sportswear Design
FSAD6900	Functional Aspects of Clothing and Design

Websites

Related Websites

<http://huijupark.wix.com/humanperformancelab>
<http://performancewear.human.cornell.edu/>

Administration

Publications

Selected Publications

Park, H., Kim, S., Morris, K., Moukperian, M., Moon, Y., & Stull, J. (2015). Effect of Firefighters' Personal Protective Equipment on Foot Function and Gait, Applied Ergonomics (Impact factor: 1.332), 48, 42-48.

Park, H., Park, J., Lin S-H., & Boorady, L. (2014). Assessment of Firefighters' Needs for Personal Protective Equipment, Fashion & Textiles, 1(1), 1-13.

Park, H., Kim, S., Wu Y., & Allen, N. (2014), Beyond Protection: Technology and Design Moving toward Human Factors of Fire Gear, AATCC Review, 14(5), 40-45.

Park, H., Trejo, H., Miles, M., Bauer, A., Kim, S., & Stull, J. (2015). Impact of

Firefighters' turnout gear on Lower Body Range of Motion, International Journal of Clothing Science and Technology. 27(3). In press.

Park, H., & Hahn, K. (2014), Perception of Firefighters' Turnout Ensemble and Level of Satisfaction by Body Movement, International Journal of Fashion Design, Technology and Education. 7(2), 85-95.

Park, H., Branson, D., Kim, S., Warren, A., Jacobson, B., Petrova, A., Peksoz, S., & Kamenidis, P. (2014), Effect of Armor and Carrying Load on Body Balance and Leg Muscle Function, Gait and Postures (Impact factor: 1.969). 39(1), 430-435.

Park, H., Branson, D., Petrova, A., Peksoz, S., Jacobson, B., Warren, A., Goad, C., & Kamenidis, P. (2013), Impact of Ballistic Body Armour and Load Carriage on Walking Patterns and Perceived Comfort, Ergonomics (Impact factor: 1.674). 56(7), 1167-1179. DOI:10.1080/00140139.2013.791377.

Han, H., **Park, H.,** & Jeon, E. (2013), User Acceptance of a Light-Emitting Diode Vest for Police, Fashion and Textiles Research Journal. 15(5), 834-840.

Park, H., Branson, D., Petrova, A., Peksoz, S., Warren, A., Jacobson, B., Goad, C., & Kamenidis, P. (2013), Effects of Body Armor and Load Carriage on Lower Limb Joint Movement, Journal of Human Performance in Extreme Environments. DOI: <http://dx.doi.org/10.7771/2327-2937.1049>

Park, H. (2012), Toward Finding an Optimal Balance between Function and Comfort in the Most Intimate Human Environment, Journal of Ergonomics, 2(4) 1:e114. DOI:10.4172/2165-7556.1000e114

Park, H., An, S. K., Peksoz, S., Cao, H., & Branson, D. (2012). Core Body Temperature Prediction through Monitoring of Microclimate under Body Armor Using Thermal Manikin, AATCC Review. 12(2), 69-72.

Park, H., & Cho, H. (2012). Social Online Communities: Information Source for Apparel Shopping, Journal of Consumer Marketing. 29(6), 400-411. Huiju Park 3

Choi, K., **Park, H.,** Chung, E. & Peksoz, S. (2011). Scientometric Analysis of Research in Smart Clothing: State of the Art and Future Direction, 2011 Lecture Notes in Computer Science, Vol. 6776, 500-508.

Park, H., Nolli, G., Branson, D., Peksoz, S., Petrova, A., & Goad, C. (2011). Impact of Wearing Body Armor on Lower Body Movement, Clothing and Textile Research Journal (Impact factor: 0.33), 29(3), 232-247.

Peksoz, S., Cao, H., **Park, H.,** An, S. K., & Branson, D. (2010). Core Temperature Prediction Modeling Using a Sweating Manikin, The 8th International Meeting Manikins and Modeling, Victoria, BC, Canada. (5 page proceeding paper)

Branson, D., Kamenidis, P., Peksoz, S., **Park, H.,** An, S. K., & Starr, C. (2010). Thermal Manikin Evaluation of Prototype Arm and Shoulder Armor, The 8th International Meeting for Manikins and Modeling, Victoria, BC, Canada. (5 page proceeding paper)

Peksoz, S., **Park, H.,** An, S. K., & Cao, H. (2009). Smart Clothing for Firefighter Protection, Intelligent Textiles and Mass Customisation International Conference, Casablanca, Morocco. (ISBN: 978-9954-8878-1-4)

***Park, H.**, Lee, J. H., & Lee, S. G. (2002). An Explorative Research for Possibility of Digital-wear Based on Motion-detective Input Technology as Apparel Product and a Suggestion of the Design Prototypes (I). Korean Journal of the Science of Emotion & Sensibility, 5(1), 33-48.

***Park, H.**, Lee, J. H., & Lee, S. G. (2002). An Explorative Research for Possibility of Digital-wear Based on Motion-detective Input Technology as Apparel Product and a Suggestion of the Design Prototypes (II). Korean Journal of the Science of Emotion & Sensibility, 5(2), 35-50.

*Lee, Y, Chung, H., **Park, H.**, Lee, J., & Cho, G. (2002). Effect of Design Elements of Block Stripe Pattern on Sensibility, Korean Journal of the Science of Emotion & Sensibility, 5(3), 21-28.

*: Published in Korean language (English abstract is included in the paper)