

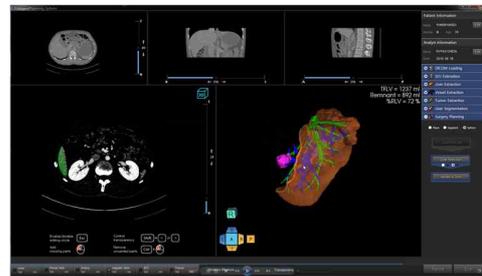
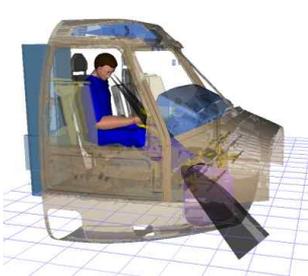
HEECHEON YOU, PH.D.

Professor & Graduate Program Coordinator
Department of Industrial & Management Engineering
Pohang University of Science & Technology
hcyou@postech.ac.kr



Dr. Heecheon You is a professor in the Department of Industrial & Management Engineering at Pohang University of Science & Technology (POSTECH). He received his B.S. and M.S. in Industrial Engineering from Seoul National University in 1988 and 1990, respectively, and his Ph.D. in Industrial Engineering from the Pennsylvania State University in 1999. He was an assistant professor in the Department of Industrial & Manufacturing Engineering at Wichita State University between 1999 and 2002 and a visiting associate professor in the Engineering Systems Division at MIT in 2009. His expertise includes ergonomics and product development.

He has over 100 peer-reviewed journal articles and 37 patents. His research focuses on ergonomic design and novel product development. He has developed ergonomic designs of various products including a transit bus driver's workstation, a helicopter cockpit, a pilot oxygen mask, a flight suit, a canister-type vacuum cleaner, and a main control room of radioactive waste facility using anthropometric data, human motion analysis, physiological analysis and/or digital humanoid simulation. Most of his designs have been adopted; for example, Figure 1.a illustrates an ergonomic cockpit design which has been implemented to the utility helicopter Surion, manufactured by KAI, Inc. Furthermore, he has developed novel, user-friendly products related to healthcare and two of his inventions such as the music game Smart Harmony for brain fitness and the virtual liver surgery planning system Dr. Liver (Figure 1.b) for assistance of safe and rational liver surgery have been commercialized. He has received over 30 awards for excellence in academic research and invention, which include the Alphonse Chapanis Best Student Paper Award from the Human Factors and Ergonomics Society in 1999 and 2009, Gold Prize and Special Award at the 2012 Geneva International Invention Fair, Gold Prize at the 2011 Seoul International Invention Fair, Grand Prix and Junior Grand Prix at the 2010/2011 International Public Design Award, and Grand Prix at the 2011 Korean University Invention Fair.



(a) Helicopter cockpit design for Surion

(b) User interface of Dr. Liver

Figure 1. Examples of ergonomic design and product development by Dr. You