
Welcome to the first issue of the *International Journal of Human Factors Modelling and Simulation (IJHFMS)*!

I begin by extending my sincere appreciation to the members of the editorial board, who have 'willingly' agreed to serve and contribute to the mission of this journal. Specifically, I extend my deepest admiration and appreciation to Dr Jingzhou Yang, who worked tirelessly toward a successful first edition. He has done so with grace and class.

With great pleasure, we launch this journal at a time when modelling and simulation are becoming increasingly important and effective in addressing numerous engineering problems. It is fascinating to see how simulation and Computer-Aided Engineering (CAE) tools have reduced time and costs associated with building prototypes. Rather than testing hardware in the laboratory, researchers can now use CAE tools to virtually test products in the digital world. These tools encompass finite element analysis, aerodynamics, and computational fluid dynamics, to name a few. While these tools have indeed made a significant impact on the manufacturing and design worlds, the human aspect remains a challenge. A vehicle, for example, must still be manufactured and then tested by a human driver on the road prior to production.

In response to this obvious and important need, research in the field of human modelling and simulation, also called digital human modelling, has emerged with great success. This journal is dedicated to publishing the results of this multi-disciplinary work, which encompasses the fields of modelling, simulation, gaming, motion capture, cognitive analysis, artificial intelligence, human factors, ergonomics, kinematics, dynamics and many other related fields.

In my opinion, the long-term vision for this field is to create intelligent human life inside a computer. This is indeed easier said than done. How can one create an accurate biomechanical model of a human being with a full musculoskeletal system, joints that work, skin that deforms, a face that makes expressions and a brain that makes decisions?

One may consider human factors modelling and simulation a maturing science with a long road ahead. However, given the rising need to understand how human beings interact with the environment, being able to send a digital human that walks, talks and reacts like we do into the digital world where products and systems are designed, but not yet made would be invaluable. Imagine a digital person telling you where safety concerns exist, where there are potential pitfalls in design, and whether or not an assembly can be maintained! Imagine having the ability to examine a complete system online without ever making a single physical prototype! Imagine the impact such technology would have on cost and time-to-market!

I welcome your submissions to this journal and look forward to the rapid advancement of this new and exciting field as we continue to push the envelope.

Karim Abdel-Malek
Editor-in-Chief