Digital Human Modeling and Simulation--Opportunities and Challenges

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This symposium brings together people with expertise in ergonomics and human motion analysis, human software development, and applications in human simulation to discuss the status of current human models and their future use in vehicle and workplace design. Over the last decade several commercially supported human simulation programs have been licensed. Also, the Society of Automotive Engineers in North America and Europe has established a technical committee to define standards and encourage the sharing of information and data to promote greater use of this emerging technology. Several automotive and aerospace companies are investing in further research and development for improved human models to allow their designers and engineers to perform ergonomic assessments of fit, clearance and sight line analyses prior to building prototype vehicles and workstations.

The experts assembled for this symposium will discuss some of the major uses of these models with illustrations of current simulation methods. Developers and researchers will present how the current models are being improved to allow a much greater range of human performance problems to be simulated in the future, as well as how such simulations can be validated.

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