The Biomechanics Laboratory

presents

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“Product Design Assessment Using Synthesized Anthropometric Data”

Traditional ergonomics and human factors assessments rely on boundary manikins or population models for assessment of products, tasks, or environments. A new approach to designing for human variability (DfHV) combines the use of manikins with statistical models of experimental data to predict the interaction of individuals. To be effective, however, this hybrid approach requires the anthropometry of a large number of individuals within the target user population. Since these data are rarely available, several methodologies for synthesizing anthropometry using relationships in available databases were developed, the most successful utilizing principal components analysis (PCA). This approach, as well as its use within the new DfHV construct, will be presented.

Friday
January 23, 2008
4:00 – 5:00 pm
111 Chambers

For more information, e-mail Steve Piazza at piazza@psu.edu or call 865-3413.