

BRIMS Tutorial Proposal

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Cognitive Crash Dummies: Here today, look toward tomorrow

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Time allotted	Topic or Event
10 min	Instructor introduction & course objectives; Survey of the audience background and interests
20 min	State of the art of predictive human performance modeling
15 min	Introduction to the software, set-up & begin first hands-on exercise
45 min	Hands-on exercise continues, with instructor and graduate student aids helping the participants. When questions or issues of general interest arise, the instructor will discuss them with the class as a whole. Participants who finish early will move on to a second exercise, which can either be supplied by the instructor or can be of their own systems.
30 min	Break
30 min	Q&A about the first hands-on exercise session. Peer discussion of modeling options and trade-offs discovered during the first session.
1 hour	Second hands-on session where the participants re-do the model from the first exercise in a more powerful way.
1 hour	LUNCH
30 min	Q&A about the second hands-on exercise session. Peer discussion of modeling options, trade-offs, and approaches to design exploration discovered during the second session.
1 hour	Third hands-on session where the participants model a more difficult interface, either from the instructor's materials or their own system.
30 min	Break
1 hour	Presentation of designs and models of volunteer participants from the third hands-on session. Peer discussion of modeling options, trade-offs, and approaches to design exploration.
30 min	Wrap up of what has been explored today and the future of predictive human performance modeling and tools to support it.

WHO WOULD BENEFIT FROM THIS TUTORIAL

The target audience includes human factors professionals and system developers who want to evaluate alternative designs before building running prototypes. No prior knowledge of perceptual, cognitive, or motor psychology, or predictive human performance modeling is required.

Participants in the BRIMS 2007 and HFES 2008 tutorials were from industry and government, (with a few from academia interested in learning to teach human performance modeling) from organizations such as Boeing, BAE, Lockheed-Martin, Toyota, Nissan, Department Of Veterans Affairs (Health Data And Informatics), and all branches of the US armed forces. Comments on the feedback forms from the Sept 2008 HFES tutorial (which HFES calls a "workshop") included:

"This tool will be very useful to me as an HF practitioner. Often we are asked how "much" better one design is compared to another and it is difficult to obtain our target users to participate in a test like this. Modeling is a much easier effort to get the answers we need."

"The workshop has excellent application to product design in industry! This was something I can take back and use immediately in HCI."

"Well taught, organized, with examples that are applied and therefore very interesting to HSI [Human System Integration] practitioners."

"Groundbreaking theories being applied to real-world designs to accurately and easily predict user performance."

"Wonderful. I can clearly see how, as a practitioner in industry, I can apply this to the numerous projects I work on."