

## **Jack C. Schryver**

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Jack Schryver has 26 years of experience (over 75 scientific articles and technical reports) conducting research in cognitive science/engineering and human factors psychology. Currently he is involved with social science modeling activities for the DHS Group Violent Intent Modeling project. Recently he conducted usability studies and experiments at a warfighter integration laboratory in order to evaluate display design concepts for command and control systems in a global missile defense environment. In early work he performed a study for the NRC in which eye tracking metrics and other cognitive workload measures were evaluated while users navigated complex display networks. At about the same time he developed a human-computer interface adapting eye movements as input media using an eyetracking device. The prototype system captured user intent in real-time to control rotation and translation of a 3D interface in a transparent and natural manner. He developed a hybrid discrete event simulation and knowledge-based simulation model of cognitive and behavioral activities of a human operator controlling an advanced reactor system. This model was an early example of dynamic linking of an operator model with a plant process code. In other projects, he developed discrete event simulation models to calculate availability of the Advanced Neutron Source, Spallation Neutron Source (SNS), Tank Waste Retrieval Manipulator Systems (comparison of manual and robotic operations) at the DOE Hanford Site, and notational Future Combat Systems (FCS). He also developed computational human decision-making models to assess timing constraints for combat identification systems proposed for Future Combat Systems.

He has a Ph.D. in Psychology from the University of California at Irvine, and a B.A. in Psychology from the University of California at Los Angeles. He is a member of the Human Factors and Ergonomics Society and the Association for Computing Machinery.