

## VIRTUAL REALITY FOR MANUFACTURING SIMULATION

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### ABSTRACT

Graphical animation has been of great benefit to simulation practitioners as a communication tool. Virtual reality, or virtual interface technology, a new technology that creates the illusion of an interactive three-dimensional environment, holds promise as the "next step" in expanding simulation's role in communication. This paper describes a joint software engineering project between the Human Interface Technology Laboratory and AutoSimulations, Inc., initiated to explore how virtual reality might impact simulations and to gain insight into bringing the technology to current, commercially available simulation software packages. We constructed a manufacturing simulation based on part of an actual factory's production line and asked both workers and managers from the facility to evaluate the virtual factory. We chose AutoSimulations' AutoMod and AutoView manufacturing simulation software packages as our representative commercial system. Our evaluation results were generally positive; however, there are more issues to be addressed before this exciting technology can be proven as an alternative to existing screen-based systems.