Human Systems Integration through a Common Modeling Language

Biography. Dr. Nancy Leveson is a professor of Aeronautics and Astronautics at MIT. She has worked in system safety and system engineering for over 40 years. One common element in her work is an emphasis on applying systems thinking to complex systems and integrating humans and social systems with hardware and software design. She is an elected member of the National Academy of Engineering and has won major awards for her research.

Abstract. Designing to prevent sophisticated human-machine interaction problems, such as mode confusion, cannot be successful without human factors experts and engineers working together. They cannot work separately on such systems. We have created a common modeling language that is successfully allowing such integrated efforts.