

Interaction Science & Collaboration Engineering: From Collaborative Design to Enterprise Management

Yan Jin, Ph.D.

Professor

Dept. of Aerospace and Mechanical Engineering

University of Southern California

yjin@usc.edu

Abstract

The advances in technologies and globalization have made today's market relentlessly competitive. Practitioners are trying to maintain their competitiveness by working together more effectively and efficiently. The challenge to the research community is how we can devise theories, methods, and technologies to improve the current practice of collaboration. In this talk, a research program on Interaction Science & Collaboration Engineering will be presented that attempts to develop concepts, methods, technology foundations, and demonstrations of the nature of interactions between non-intelligent and intelligent beings and how technologies may be developed to engineer human collaborations in order to make them more effective and efficient. A cognitive, complex system based, and organizational approach is taken in our endeavor. Example research projects and some preliminary results will be presented.

Bio:

Dr. Yan Jin is Professor of Aerospace & Mechanical Engineering at University of Southern California and Director of USC IMPACT Laboratory. He received his Ph.D. degree in Naval Engineering from the University of Tokyo in 1988. Since then, Dr. Jin has done research on design theory, knowledge-based systems, distributed problem solving, organization modeling, along with their applications to computer integrated manufacturing, collaborative engineering, and project & enterprise management. Prior to joining USC faculty in 1996, Dr. Jin worked as a senior research scientist at Stanford University for 5 years. Dr. Jin is a recipient of National Science Foundation CAREER Award (1998), TRW Excellence in Teaching Award (2001), Best Paper in Human Information Systems (5th World Multi-Conference on Systemics, Cybernetics and Informatics, 2001), and Xerox Best Paper Award (ASME International Conference on Design Theory and Methodology, 2002).