TOPIC	Human Judgment and Decision–making Process
ORGANIZERS	Student Leadership Council and Faculty of ACIT Institute and TECHLAV Center
AREA	Human Decision Making and Information Visualization
SPEAKER	Younho Seong
DATE	Friday September 16 2016
TIME	3:00 – 4:00 P.M. (EDT)
VENUE	Fort IRC 410, North Carolina A&T State University, UTSA and SIPI will be joining through video-conferencing
FEES	No Charge

SYNOPSIS

Increasingly, people are faced with the need to make decisions in fast paced, dynamic, information rich environments. Information in this environment is often uncertain, and decisions are made in conjunction with complex, computerized systems. Such computerized systems, often referred to as automated decision aids, are designed to capture various aspects of the environment to support human decision making tasks. Some of these aspects are made available due to technological advancements to reduce uncertainty in the environment. Recent fast paced automated technological advancements underscore the need to provide system designers with the tools to develop information displays, and training programs/regimens as well as systems, which support decision–making in complex, dynamic, and uncertain situations.

Although these advancements have made previously inaccessible information available, the uncertainty may not be reduced because of its probabilistic nature between the information and the environment to be identified. In fact, the uncertainty may be simply shifted to different locations. Therefore, a model of human decision making needs to consider how the loci of uncertainty can affect human performance, which in turn affects the design of such technological advancements to support human performance in decision making. As a result, human trust in such system plays a critical role in the utilization of these systems and their decision making performance. In this framework, we can identify three important performance shaping factors; uncertainty/ambiguity, dynamic environment, and information visualization. The objectives of this presentation are to provide outlines on 1) understanding and modeling human judgment and decision–making process and performance with decision aids, 2) understanding the role of human trust in decision aids on human decision–making, and developing an integrated model of decision–making with and trust in decision aids, and finally 3) designing interface to support decision–making tasks by manipulating the format of displayed information, or the feedback provided to individuals during training exercises, in order to support performance on decision–making tasks.

ABOUT THE SPEAKER

Dr. Seong, the lead for Thrust 3, is an Associate Professor in Industrial & Systems Engineering at N.C. A&T and has been conducting research on judgment and decision making, and trust in automation for more than 15 years. His series of work on human judgment, decision- making with and trust in autonomous decision aids has been widely cited by the human cognition community as a way to improve judgment and decision making performance by transforming the decision aid to be "more transparent." His models of human decision-making and trust have been widely applied to the military domain and financial industries. Recently, his work on "making systems more transparent" has been continued and supported by DoD ARO through his "Center for Engineering Transparency."