

Model Driven Experimentation: The A2C2 Experience

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Abstract

Experiments with teams of human subjects in which they carry out realistic decision making tasks are difficult to design and control. There are many variables, each one with a wide range of values. The use of detailed executable models in the design of experiments is perceived as one feasible approach to address these issues. A process for the use of modeling and simulation in the design of complex experiments that address command and control issues is described; the approach is then generalized to address series of experiments. The current theoretical and experimental research effort on Adaptive Architectures for Command and Control (A2C2) is used to illustrate the approach.