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## WORK MODELS FOR INTERFACE DESIGN: TECHNIQUES AND APPLICATIONS IN COMPLEX DOMAINS

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The modeling of human work is ubiquitous in the cognitive engineering community. Modeling can take many diverse forms, but its goal is always the same: to provide designers with a deeper understanding of the needs of human operators. This understanding becomes ever more critical as work domains increase in complexity because the capability of designers to anticipate all of the needs in all possible contexts becomes less tenable without modeling tools. Why, then, is there such a proliferation of work analysis techniques? Even more importantly, which modeling techniques are most useful for what types of design problems? In this symposium, several papers will be presented describing the application of various modeling techniques to the design of complex work environments. An emphasis will be placed on identifying the modeling techniques that are useful, or not useful, for various types of application domains and for different design goals. The strengths of integrated modeling techniques will be examined as compared with their increased costs. The various presenters will provide guidance for the selection of design problems, the application and payoffs from the modeling effort, and the use of results for design.