

TAKING THE "VIRTUAL" OUT OF VIRTUAL REALITY

Carlo H. Séquin
CS Division, University of California, Berkeley
E-mail: sequin@cs.berkeley.edu

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Abstract

Today's graphics programs cannot only produce stunning photo-realistic images or convincingly real scene displays for interactive exploration; they can also produce physical output -- thanks to the emergence of several different layered manufacturing technologies. For many design activities creating tangible models through some rapid-prototyping process is a new and crucial feedback loop for debugging the functionality or customer-appeal of a new product. Dr. Séquin has two decades of experience with creating mathematical visualization models and designs ranging from university buildings to abstract geometrical sculptures. Turning these virtual creations into physical realities, however, raises a whole new set of issues that often are overlooked in the initial virtual design phase.