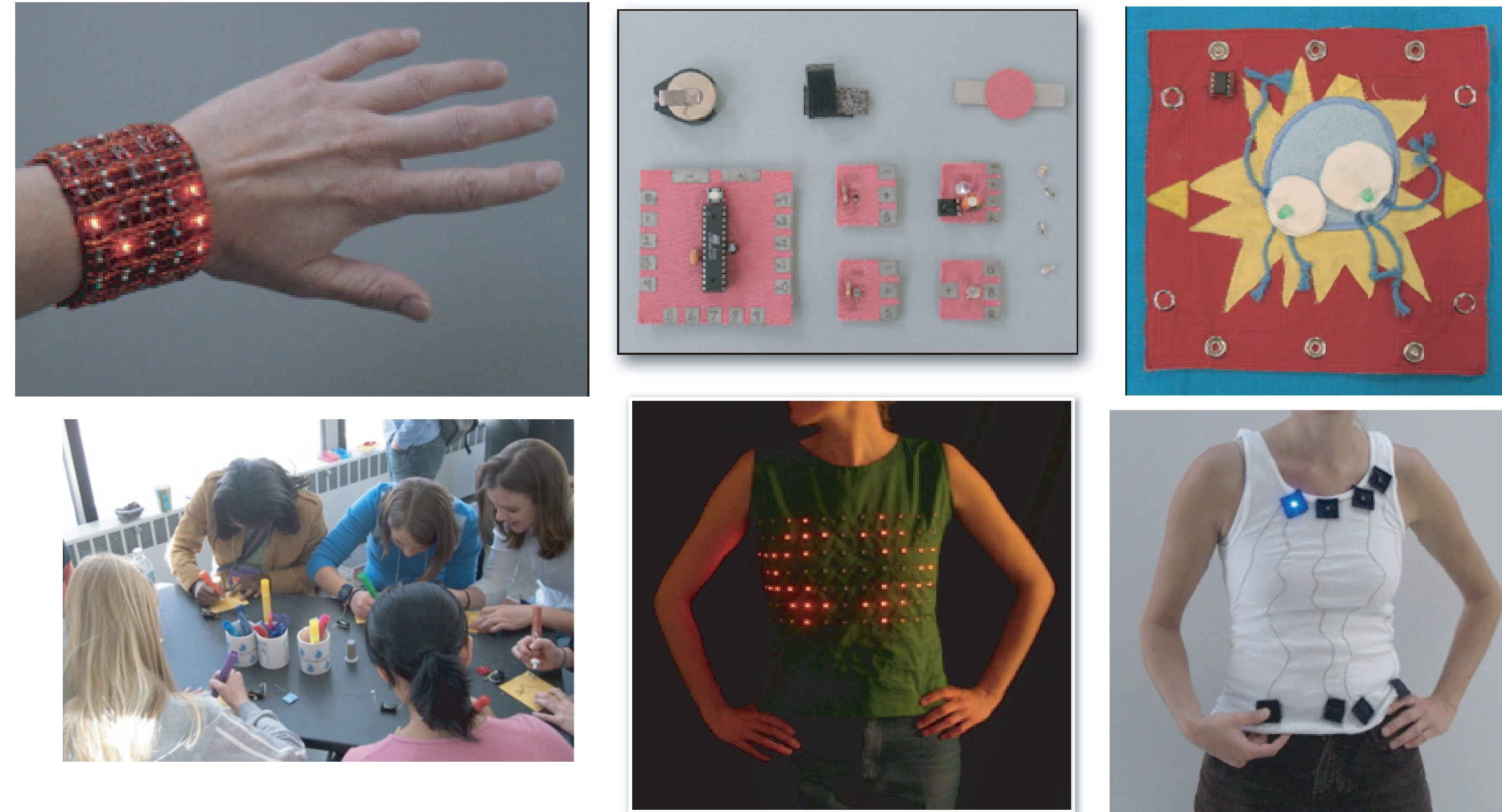


Computationally-Enhanced Construction Kits

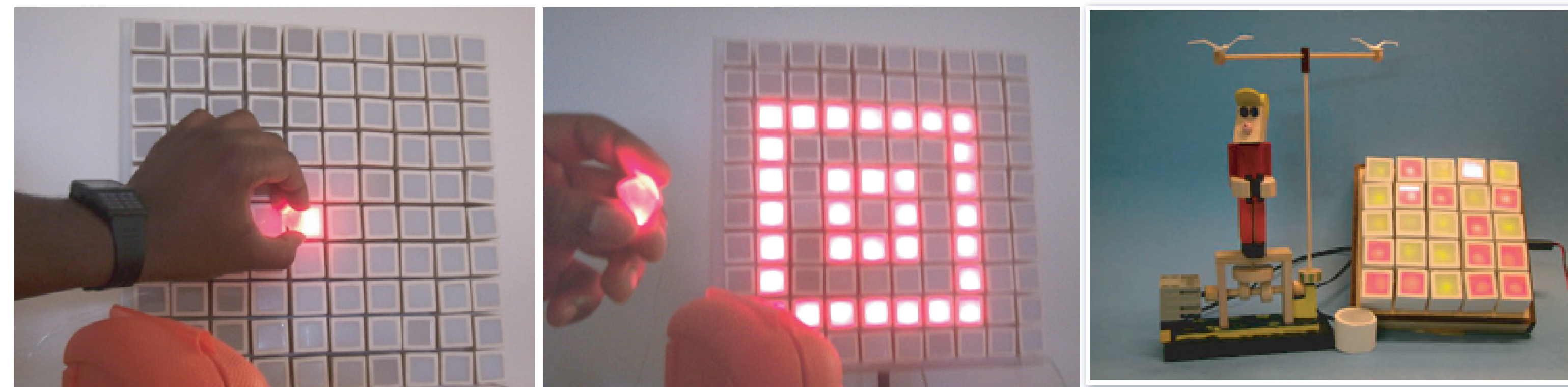
Integrating Tangible and Computational Media for Construction and Design

Michael A. Eisenberg (University of Colorado) and Mark D. Gross (Carnegie Mellon University)



e-textiles & quilt snaps

fabric based electronics and computational construction kits for wearable computers



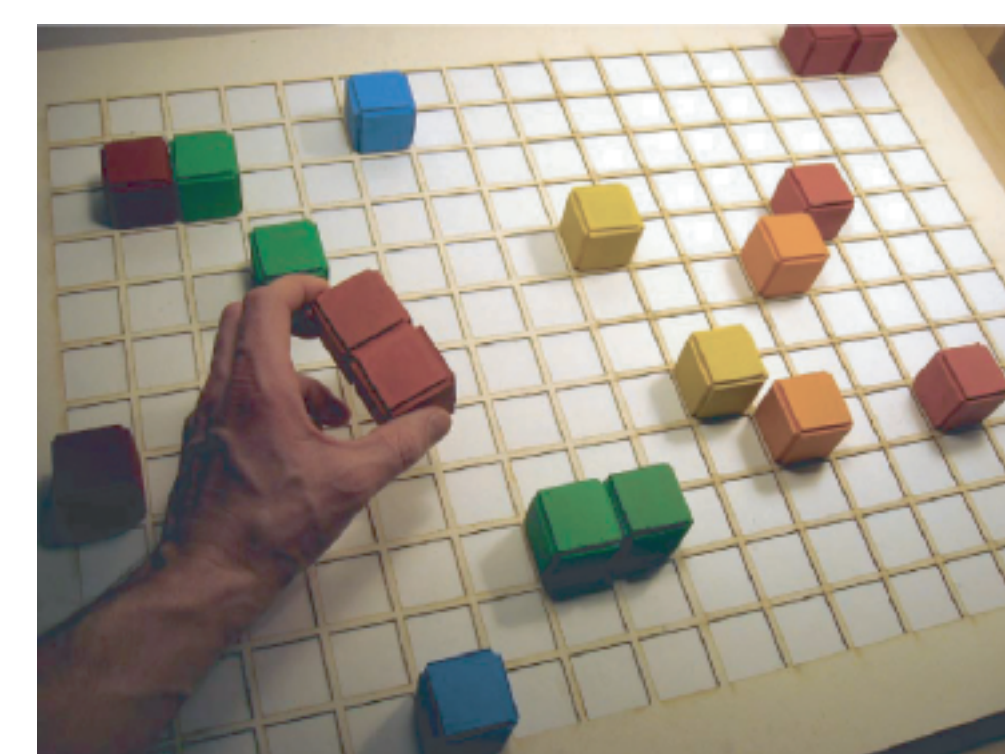
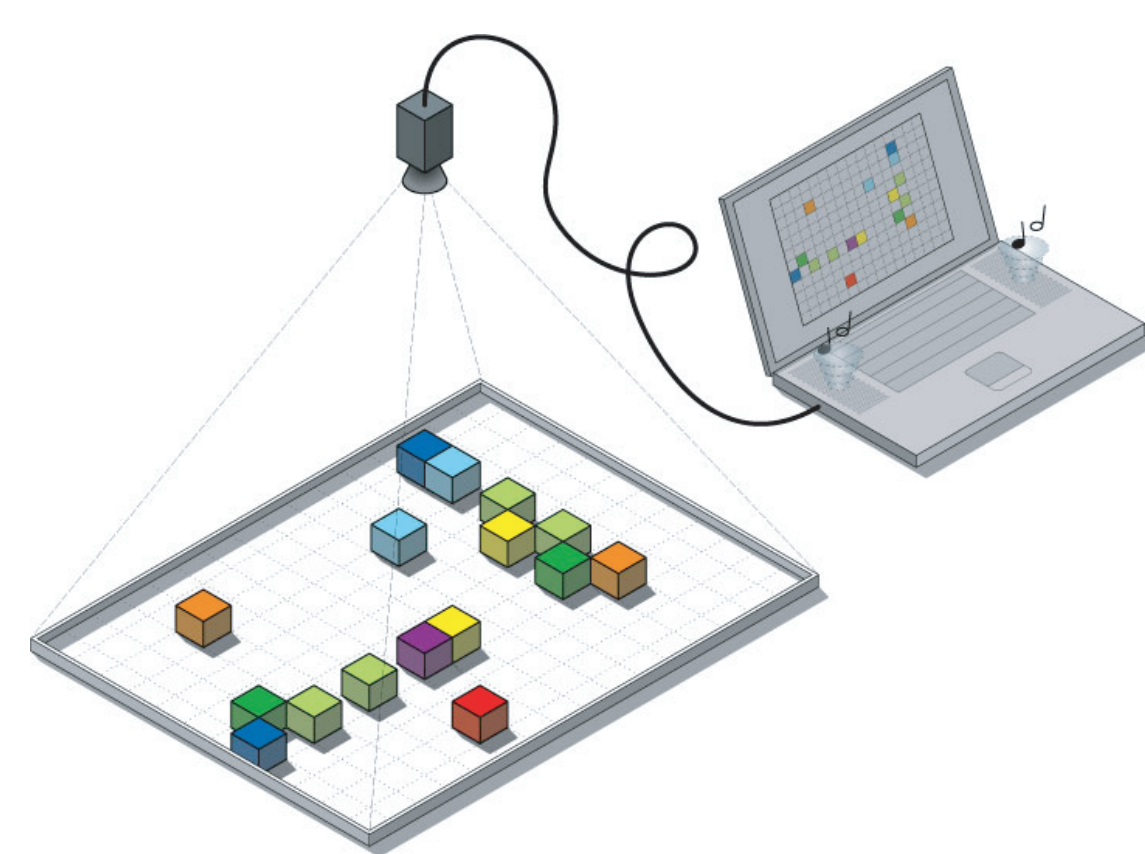
smart tiles

programmable tiles assemble into an array to make interactive, beautiful dynamic patterns



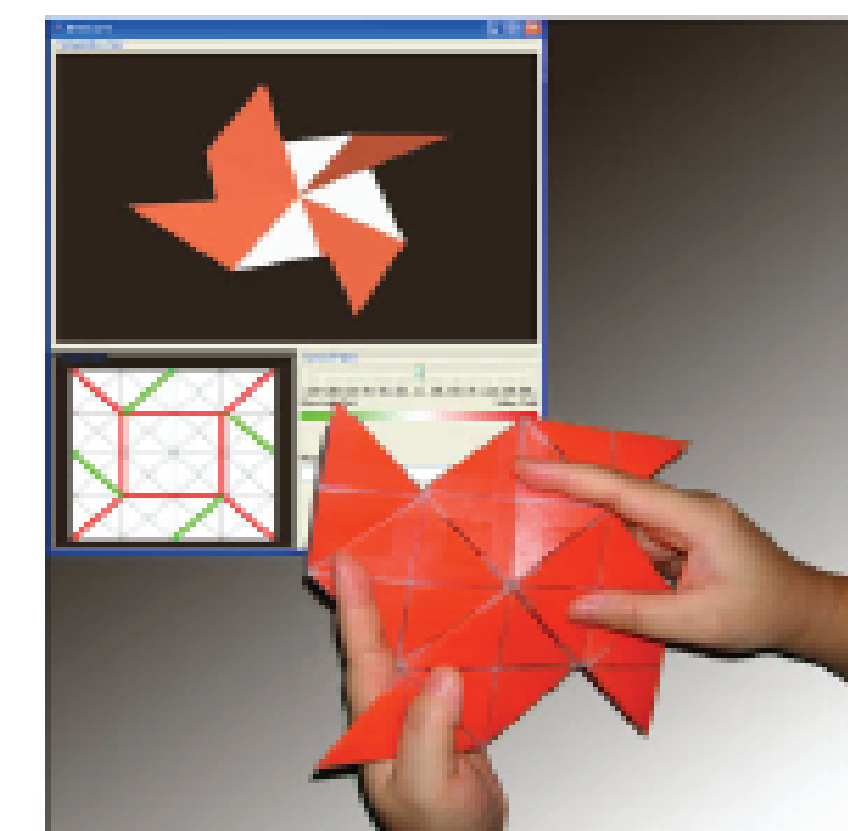
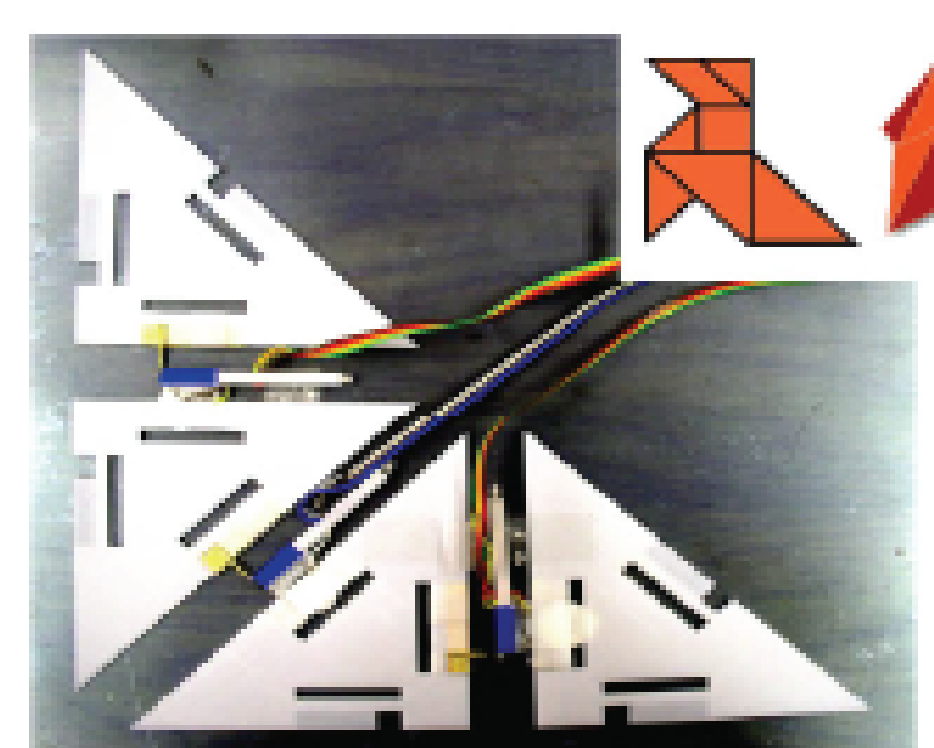
storytelling blocks

children make animations by rotating blocks that program character actions and scenes



bach blocks

colored blocks are at once an instrument and a notation for making music

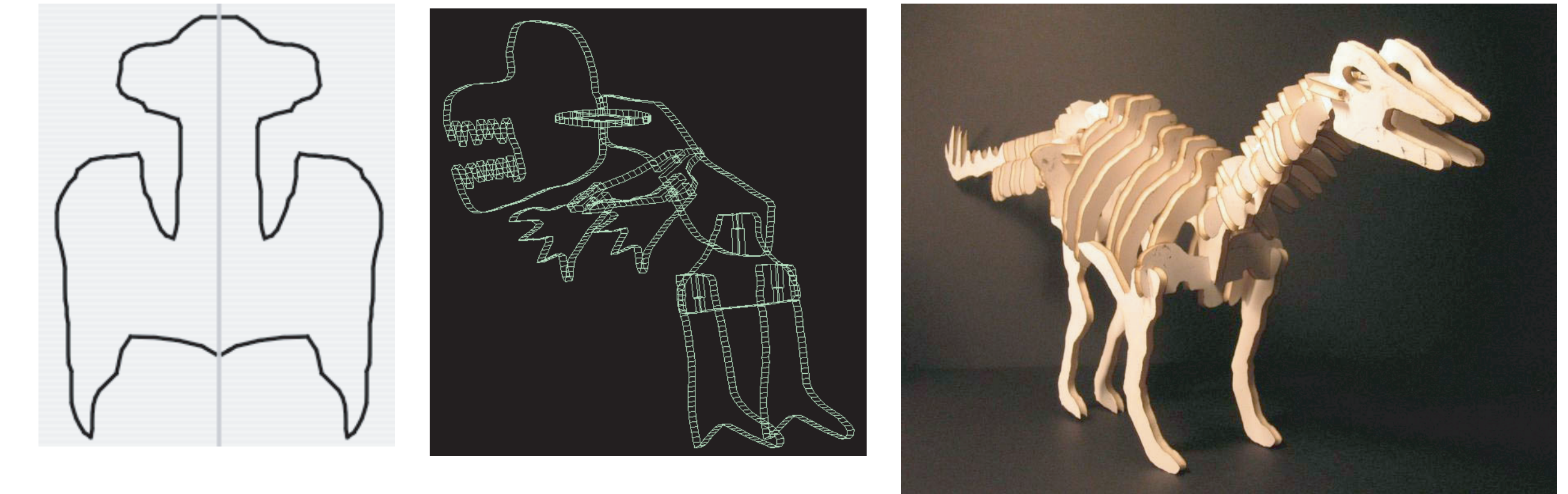


easigami

an origami advisor embeds bend sensors in a flat folded sheet

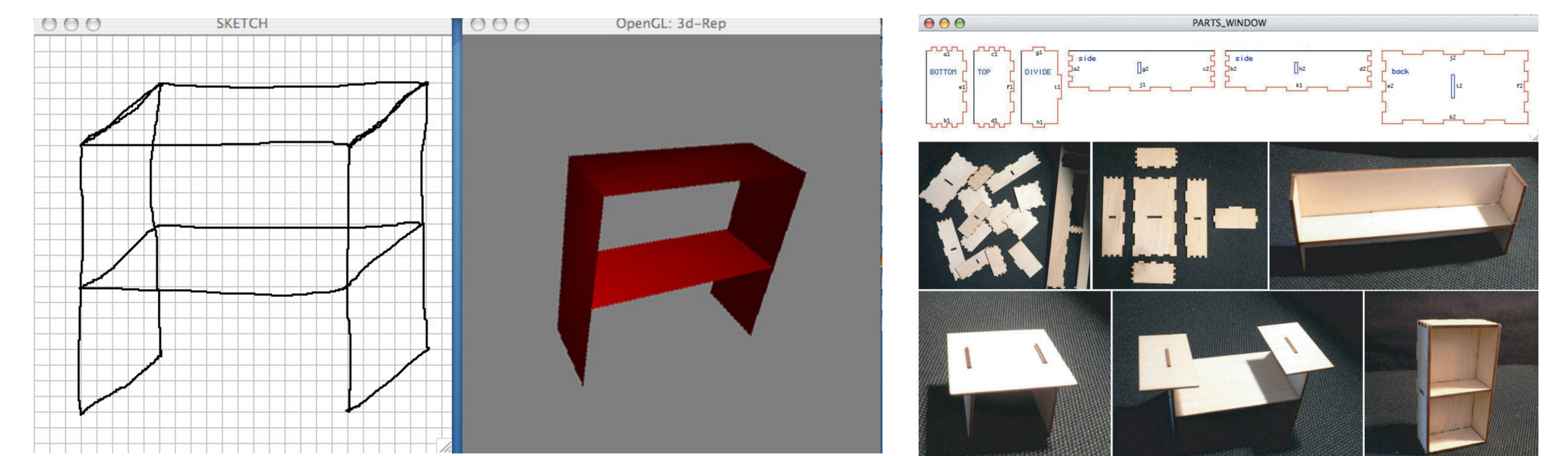
design-o-saur

create your own dinosaur by drawing its bones and cutting it out on a laser cutter



furniture factory

sketch planar surfaces in 3-D to create wood assembly kits



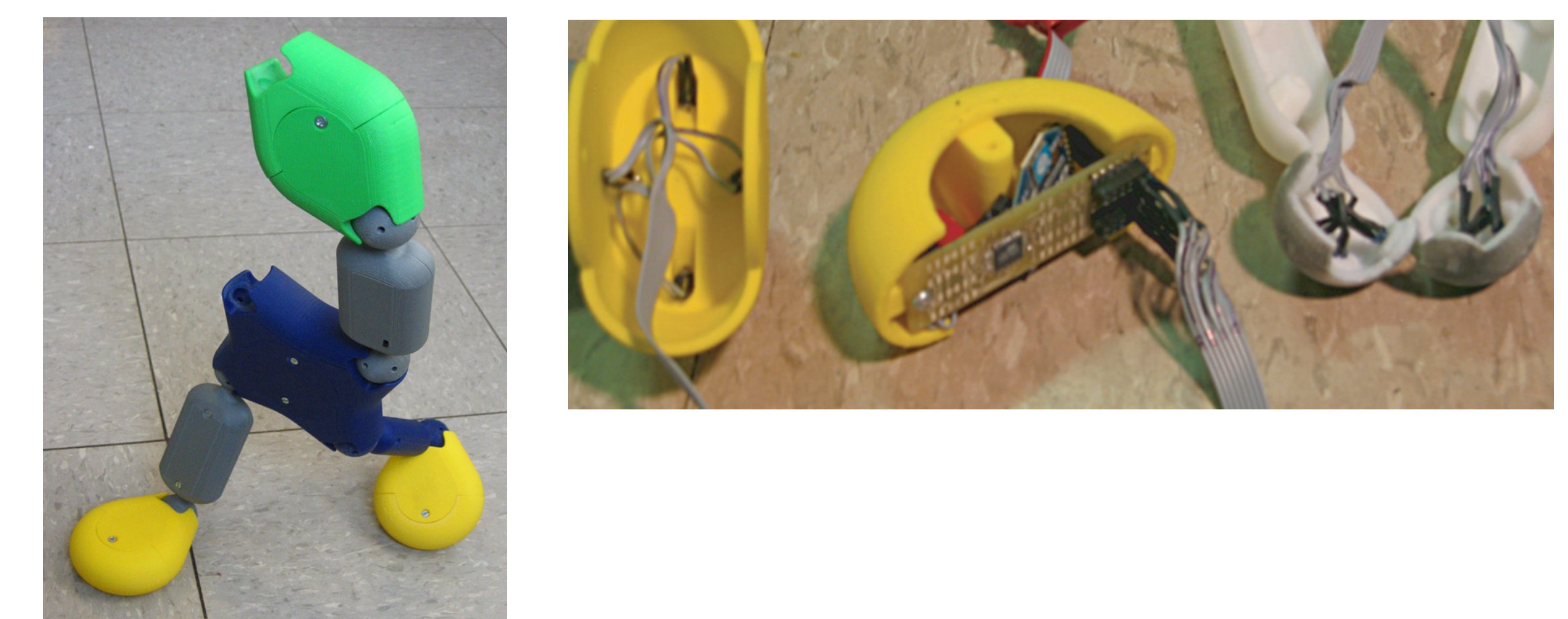
roBlocks

each block embeds sensing, actuating, or computation for building robots



flexy

an instrumented hub-and-strut construction kit that senses configuration and dynamic geometry



boda blocks

three-dimensional cellular automata building blocks assemble and flash their patterns in light

