

Directing Improvisational Actors

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(Invited Talk)

Abstract

I will talk about agents that function as improvisational actors who spontaneously and cooperatively enact stories at performance time. Like human improvisors, our agents are intended to exploit known heuristics for producing engaging performances and to adapt to one another's behavior. In addition, they adapt their improvisations to directions from exogenous sources, such as people or other computer system components. We call this general paradigm "directed improvisation."

More specifically, I will describe actors who improvise scenarios defined by three kinds of directions: plot, role, and characterization. These directions are substantially independent. For a given performance, a group of actors is directed to enact a shared plot, within which each individual actor is directed to assume a particular role and to effect a particular characterization. Continually adapting to one another's immediate behavior and to their respective directions, the actors improvise their joint performance. Given the same directions for a subsequent performance, individual actors might make different improvisational choices, which would propagate through their adaptations to one another. By deliberately changing the directions given to individual actors, a director can shape the mutually adaptive behavior of the ensemble.