Creative Support Companions: Some Ideas

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Abstract

An exciting opportunity for AI is the development of intelligent assistants that, working with people, enable them to do far more than they can alone. What would that mean for creative activities? This talk explores some ideas for using the Companion cognitive architecture to create software collaborators that support creative work. Companions include human-like analogical processing, facilities for natural language and sketch understanding, and rich relational representations that capture aspects of human visual, spatial, and conceptual knowledge. For supporting creative activities, this should enable them to (1) help suggest and explore cross-domain analogies, (2) interact via natural modalities, providing higher communication bandwidth and reducing friction compared to software tools, and (3) adapt to their human partners over time, building up a portfolio of joint work that can be drawn upon in future efforts.