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A Psychologically Plausible Computer Model for the Perception of Partially Occluded and Fragmented Figures

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Time: 12:15pm-1:15pm
Place: NS 135

Perception of partially occluded figures remains a challenging, unsolved problem in the field of **vision science**. **Computer vision** researchers have made some progress on narrowly defined versions of this problem, but have not as yet developed a general solution. Perceptual **psychologists**, on the other hand, have developed several theories of the perception of partially *occluded figures*, but it is difficult to distinguish among these theories. Worse, these theories seem to predict that perception of *fragmented figures* should be difficult, even when this is often clearly not the case.

In this talk, I will describe a new computer model and underlying psychological theory for explaining the perception of *both* partially occluded and fragmented figures. Additionally, I will present evidence, in the form of computer model simulations and human psychophysical data, which supports my claim that this new computer model is plausible as a model of this particular aspect of human perception.