Abstract:

Title: Memory biases in risky choice

Abstract: When people make risky decisions based on past experience, they must rely on their memories. These memories, however, need not be veridical, and biases in those memories can lead to biases in choice. In this talk, I show how people exhibit stronger memories for the best and worst outcomes that they experience in a given context. This memory bias leads people to be more risk seeking for gains than losses, which is opposite to the usual pattern observed when people are told about the odds and outcomes. This choice bias seems very deeply ingrained—and is shared with other animals, including pigeons and chimpanzees. This pattern of risky choice appears across different domains, including when people are choosing between different monetary outcomes or even different effort levels. When asked afterward about which outcomes they encountered, people are very poor at recalling the exact ones and instead confabulate outcomes in line with their choice biases. I interpret these results in terms of a computational model that learns through a simple trial-by-trial iterative process, enhanced by additional samples drawn from memory.