



# CS 416

## Artificial Intelligence

*Lecture 13*

*First-Order Logic*

*Chapter 8*

# Guest Speaker



***Topics in Optimal Control, Minimax Control, and Game Theory***

***March 28<sup>th</sup>, 2 p.m. OLS 005***

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***This is a nontechnical introduction, mainly thru examples, to some recent topics in control and game theory, including adaptive control, minimax control (a.k.a. "worst-case control" or "games against nature"), partially observable systems (a.k.a. controlled "hidden Markov models"), cooperative and noncooperative game equilibria, etc.***



# First-order logic

*We saw how propositional logic can create intelligent behavior*

*But propositional logic is a poor representation for complex environments*

***First-order logic** is a more expressive and powerful representation*