CS343
Artificial Intelligence

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Good Afternoon, Colleagues
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Are there any questions?
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- Markov blanket?
Logistics

- Trickier readings: MDPs and RL
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- Multiagent assignment due on Thursday at beginning of class
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- Gal Kaminka talk right after class today
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• Rob Holte talk on Thursday - on search
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- Multiagent assignment due on Thursday at beginning of class
- Gal Kaminka talk right after class today
- Rob Holte talk on Thursday - on search
- Midterm will cover through this week’s readings (MDPs, but not RL)
Bid for a Car

- You asked your mechanic to go check it out
- The number on your piece of paper is what he told you it’s worth
- Mechanic is unbiased (equal chance of overestimating and underestimating)
Bid for a Car

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• Let’s run an auction
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- Bidding starts at $1000
- $10 increments allowed
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• The number on your piece of paper is what he told you it’s worth
• Mechanic is unbiased (equal chance of overestimating and underestimating)
• Let’s run an auction
• Bidding starts at $1000
• $10 increments allowed
• If you win the car, your utility is the car’s true worth minus the amount you bid
• If you don’t win the car, your utility is -$10
How did you do?

- Most of you ended with utility of -$10
- How about the winner of the auction?
How did you do?

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- How about the winner of the auction?
- The mechanics were unbiased estimators
- For each of you with a value $x$ too high, someone else got a value $x$ too low
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- How about the winner of the auction?
- The mechanics were unbiased estimators
- For each of you with a value $x$ too high, someone else got a value $x$ too low
- Numbers were $1100, 1125, 1150 \ldots 1900$
- True value: Peter Stone
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- How about the winner of the auction?
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- Utility of the winner?
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- Utility of the winner?

**Winner’s curse!**