

# **CS343**

# **Artificial Intelligence**

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Department of Computer Science  
The University of Texas at Austin

# Good Morning, Colleagues

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Are there any questions?

# Assignment Timeline

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  - Monday 5/4: Qualification closes

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  - Tuesday 5/5: Final tournament submission due

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  - Wednesday 5/6: Final tournament (location TBD)

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  - Wednesday 5/6: Final tournament (location TBD)
  - Thursday 5/7: Recap and winner announcements

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  - Particle filters, decision networks, VOI

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  - Particle filters, decision networks, VOI
  - (Not a lot of pages, but important)



# Inference in Temporal Models

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- Filtering
- Prediction
- Smoothing
- Most likely Explanation

# Inference in Temporal Models

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- Filtering
- Prediction
- Smoothing
- Most likely Explanation
- Learning

# Common Questions

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- Always initialize to uniform distribution? Does it matter?
- What's a stationary process (how does it solve infinite  $t$ )?
- How does a stationary distribution work?
- (Gibbs sampling)
- How do you choose the order of the model?
- How can increasing the order be modeled as having more variables?
- How do you compute the mixing time?
- How does fixed-lag smoothing