Good Afternoon Colleagues
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• Are there any questions?
Logistics
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- Nice responses!
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  - Length and content good
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  - Be clear and specific
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  - Look for programming assignment opportunities
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- Some of you got replies
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- Today: self-introductions
Logistics

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  – Look for programming assignment opportunities

• Some of you got replies

• Today: self-introductions

• Thursday: Discussion leader assignments
Some Questions

- What’s a model?
Some Questions

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• Reward function vs. value function
Some Questions

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• Reward function vs. value function
  – Tic-tac-toe example
Some Questions

- What’s a model?
- Reward function vs. value function
  - Tic-tac-toe example
  - Phil making breakfast example
Some Questions

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- Reward function vs. value function
  - Tic-tac-toe example
  - Phil making breakfast example

- Distinction with evolutionary methods?
  - Tic-tac-toe example
Some Questions

- What’s a model?

- Reward function vs. value function
  - Tic-tac-toe example
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- Distinction with evolutionary methods?
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Reduced Formalism

**Knowns:**
- \( S = \{ \text{Blue, Red, Green, Black, \ldots} \} \)
- Rewards in \( \mathbb{R} \)
- \( A = \{ \text{Wave, Clap, Stand} \} \)

**Unknowns:**
- \( \mathcal{R} : S \times A \mapsto \mathbb{R} \)
- \( \mathcal{T} : S \times A \mapsto S \)

\[
\begin{align*}
    r_i &= \mathcal{R}(s_i, a_i) \\
    s_{i+1} &= \mathcal{T}(s_i, a_i)
\end{align*}
\]