

# **CS394R**

# **Reinforcement Learning: Theory and Practice**

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# Good Morning Colleagues

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- Are there any questions?

# Logistics

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- First 3 programming assignments past due

# Logistics

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- First 3 programming assignments past due
  - Until literature survey is due: 1 point off
  - Until last day of class: 2 points off
  - After last day of class: 3 points off
  - After final project is due: 4 points off

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- Complete the class survey by Wed. at 5pm

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- Literature review due November 10th

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  - At least 10 refs

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- Literature review due November 10th
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  - Also reiterate proposal; be more concrete; answer the biggest questions; preliminary results



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- Complete the class survey by Wed. at 5pm
- Literature review due November 10th
  - At least 10 refs
  - Also reiterate proposal; be more concrete; answer the biggest questions; preliminary results
  - Partial draft for final project

# Overview

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- RMax: model-based learning in polynomial time

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  - High-level idea (pdf)

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- MBIE: more practical

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- MBIE: more practical
- Fitted R-Max: Extend to continuous state space (pdf)



# Discussion

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- What's more interesting? Theoretically grounded algorithms? Or algorithms that work in practice?

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- What's more interesting? Sample complexity? Or average loss?