CS394R Reinforcement Learning: Theory and Practice

Peter Stone

Department of Computer Science The University of Texas at Austin

Good Morning Colleagues

• Are there any questions?





• Make progress on final projects!





- Make progress on final projects!
- This week's readings: financial applications





- Make progress on final projects!
- This week's readings: financial applications
 - One old one, one newer





- Make progress on final projects!
- This week's readings: financial applications
 - One old one, one newer
- Next week's readings: robot applications
 - Kohl: Policy gradient RL somewhat like Moody's RRL





- Make progress on final projects!
- This week's readings: financial applications
 - One old one, one newer
- Next week's readings: robot applications
 - Kohl: Policy gradient RL somewhat like Moody's RRL
 - Ng: Helicopter learning: model-based, variance reduction





- Make progress on final projects!
- This week's readings: financial applications
 - One old one, one newer
- Next week's readings: robot applications
 - Kohl: Policy gradient RL somewhat like Moody's RRL
 - Ng: Helicopter learning: model-based, variance reduction
 - **Riedmiller:** Learning directly from vision



Class Discussion





 This paper wasn't tested against state of the art methods such as VWAP strategies. That could have led to something fieldable



- This paper wasn't tested against state of the art methods such as VWAP strategies. That could have led to something fieldable
- Dark pool algorithm implemented, may still be used



- This paper wasn't tested against state of the art methods such as VWAP strategies. That could have led to something fieldable
- Dark pool algorithm implemented, may still be used
- Biggest promise: layering on top of existing best practices

