DRL

February 4, 2021

1 Introduction

TAG: DRL

Question 1. what is computational design?

Remark 1. Course link:

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https://cmudeeprl.github.io/403_website/
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Remark 2. Katerina F.

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"My genes have strong priors from the world"
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Remark 3. Inconsistent rewards lead to addiction.

Remark 4. For a long time large emphasis on discovering new behaiors in DRL. Now thinking we need to develop behavior repetoire and associate with some stimuli.

Remark 5. Curiosity, a desire to see new things, very intrinsically powerful.

Remark 6. Conor Igoe:

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For a fixed known opponent, the evolution of chess is markovian from the perspective of the ma
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In some cases(such as driving) we need multiple frames/time steps to even attempt to play. But this can also be redefined as markovian by letting states correspond to multiple time steps.

Remark 7. Model vs. non-model based. Can we learn via simulation or not.

Remark 8. Cannot use gradient based optimization often in DRL. We can if we have a model.

1.1 The Embodiment Hypothesis

Remark 9. Link:

`https://cogdev.sitehost.iu.edu/labwork/6_lessons.pdf`

Remark 10. The six lessons from child deveopment:

1. Be multimodal