Plan C

甄景贤

August 23, 2018

Abstract

Starting from this analogy:

$$\begin{array}{ccc} \text{逻辑语法} & & \text{神经网络 graph re-writer} \\ \downarrow & \approx & \downarrow \\ \text{partial model} & & \text{graph model} \end{array} \tag{1}$$

The object being optimized is a set of logic formulas, or a model-rewriting function. This is our domain D. If the function is parametrized then the domain is $\mathbb{R}^n$ and we're back to traditional optimization.

The model space can also be designed. The most "geometric" model may be a set of points and a set of regions defined by micro-NNs. The model rewriter will look at a local region in the model, which would be some points and some regions. But the function that acts on this partial model is still "weird".

1 A recap of reinforcement learning

The crucial step is the Bellman update.