

Deep Learning@Coursera

week2 outro

Deep Learning is...



Yandex
Data Factory

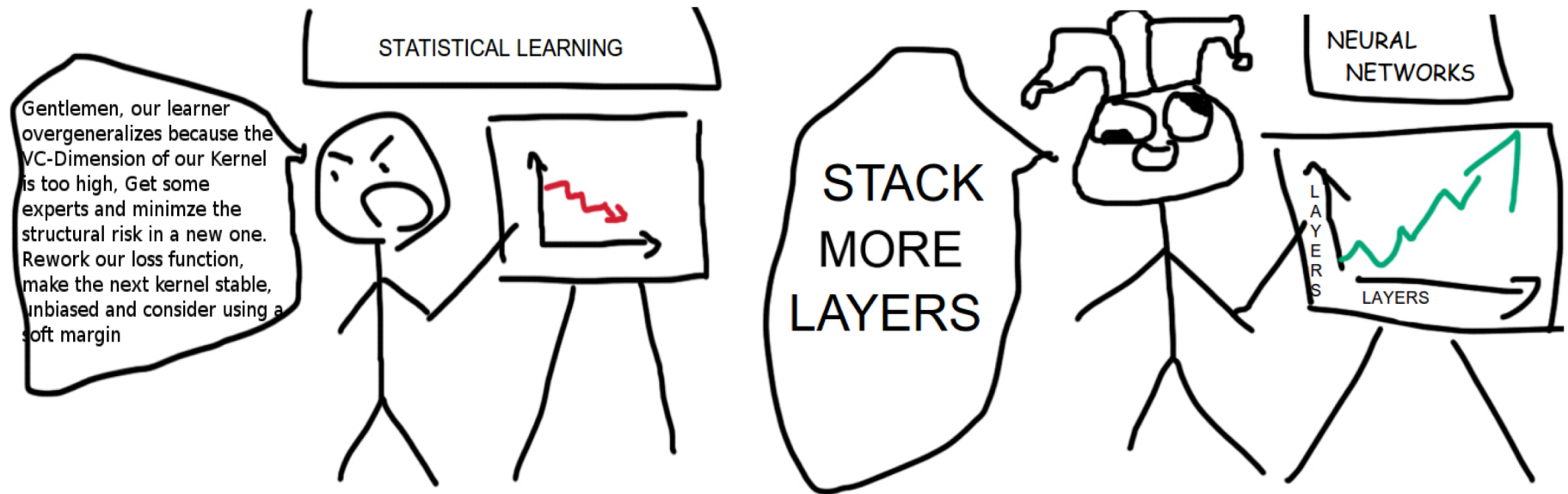
LAMBDA 



**British Hedgehog
Preservation Society**

Not magic!

Don't expect deep learning to solve all your problems for free.
For it won't.



<https://i.warosu.org/data/sci/img/0073/62/1435656449422.png>

Not magic

Book of grudges

- No core theory
 - Relies on intuitive reasoning

Not magic

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- Computationally heavy
 - Running on mobiles/embedded is a challenge
- Pathologically overhyped
 - People expect of it to make wonders

Deep learning is a language

Deep learning is a language

in which you can hint your model
on what you want it to learn

Deep learning is a language

Say, you train classifier on two sets of features



Raw
features

The diagram consists of three rounded rectangular boxes. On the left side, there are two blue boxes stacked vertically. The top blue box contains the text 'Raw features' and the bottom blue box contains the text 'High-level features'. On the right side, there is a single orange box containing the text 'Target'. There are no arrows or other graphical elements connecting these boxes.

High-level
features

Target

Deep learning is a language

Say, you train classifier on two sets of features

Raw
features

Car photo
(image pixels)

High-level
features

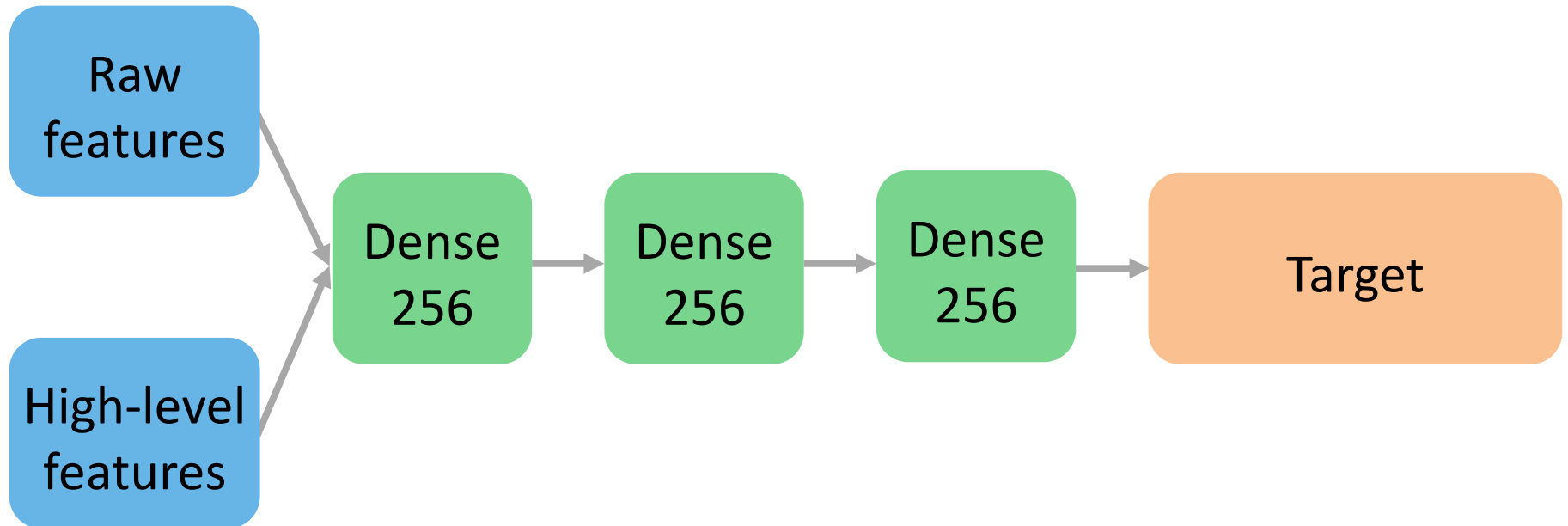
Car brand,
model, age,
blemishes

Car
price

Target

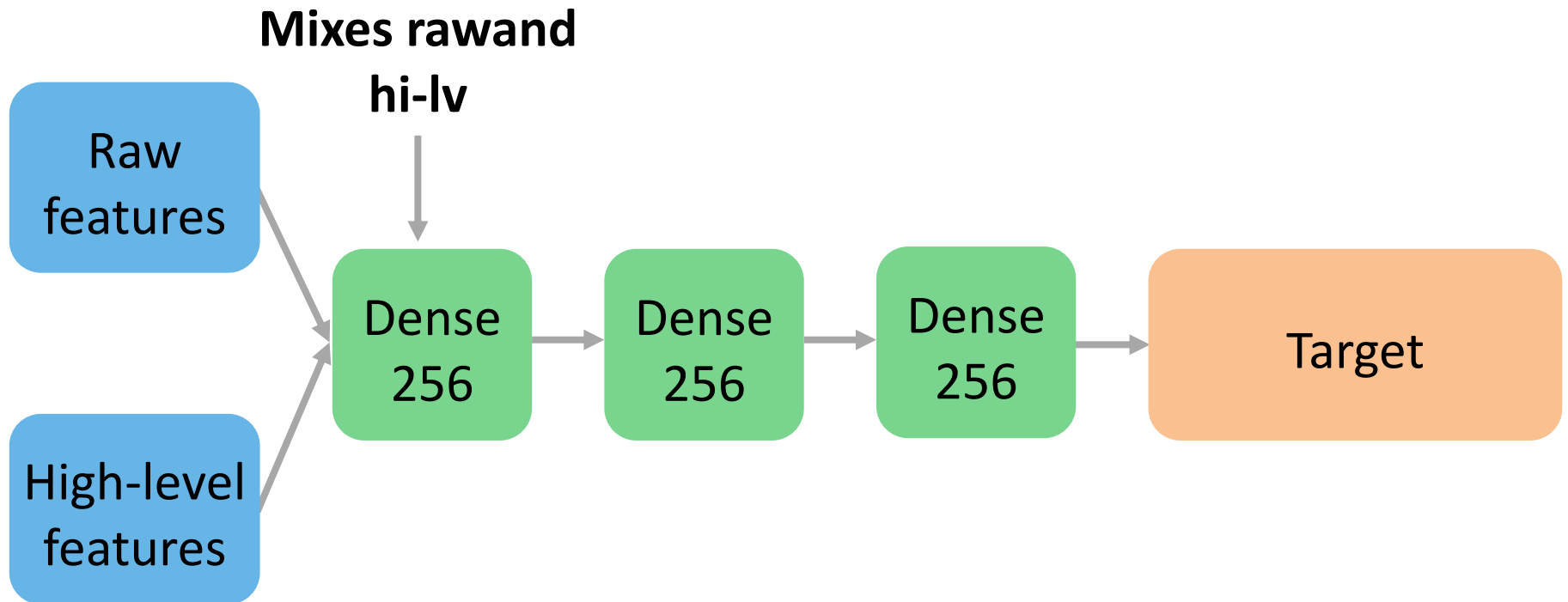
Deep learning is a language

Naive approach



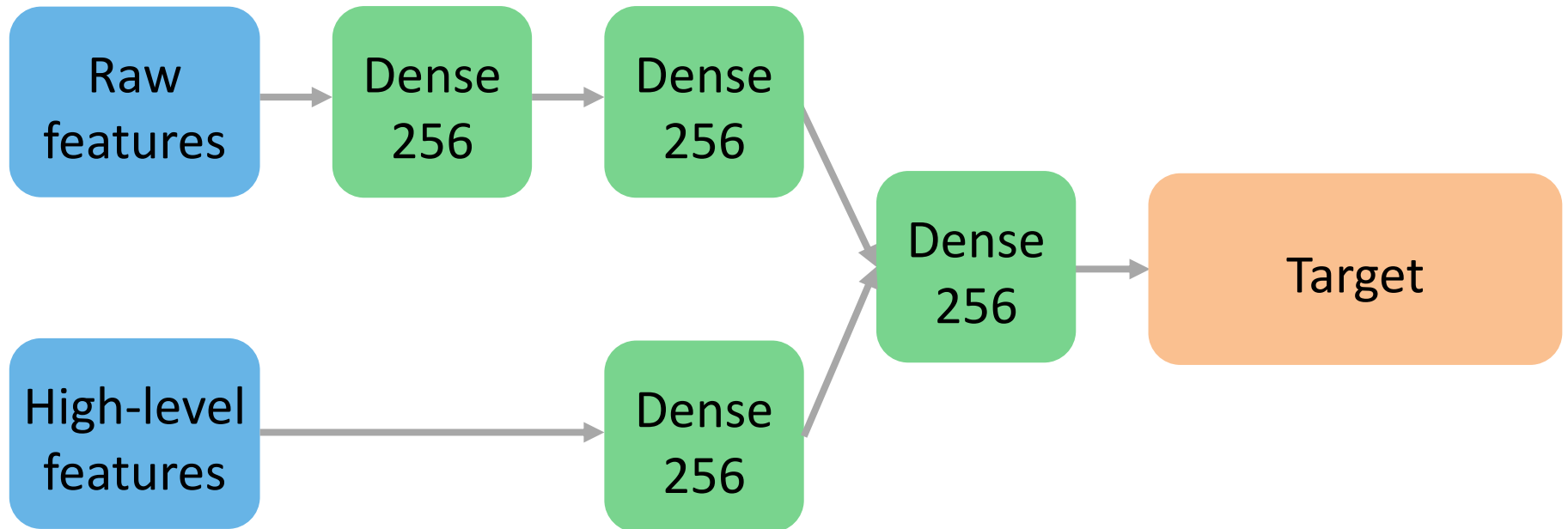
Deep learning is a language

Naive approach



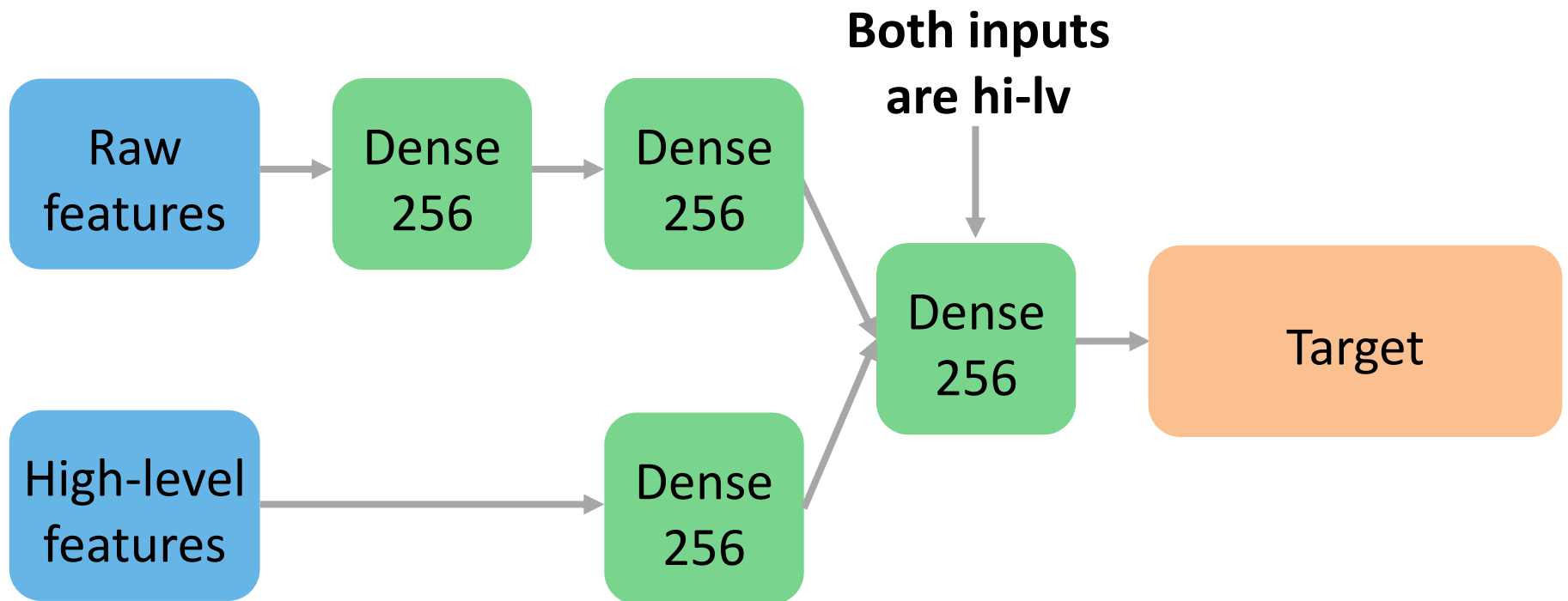
Deep learning is a language

Less naïve approach



Deep learning is a language

Less naïve approach



Deep learning is a language

“Image features should be less important”
if that's what you want to say

