Deep Learning@Coursera

week2 outro

Deep Learning is...

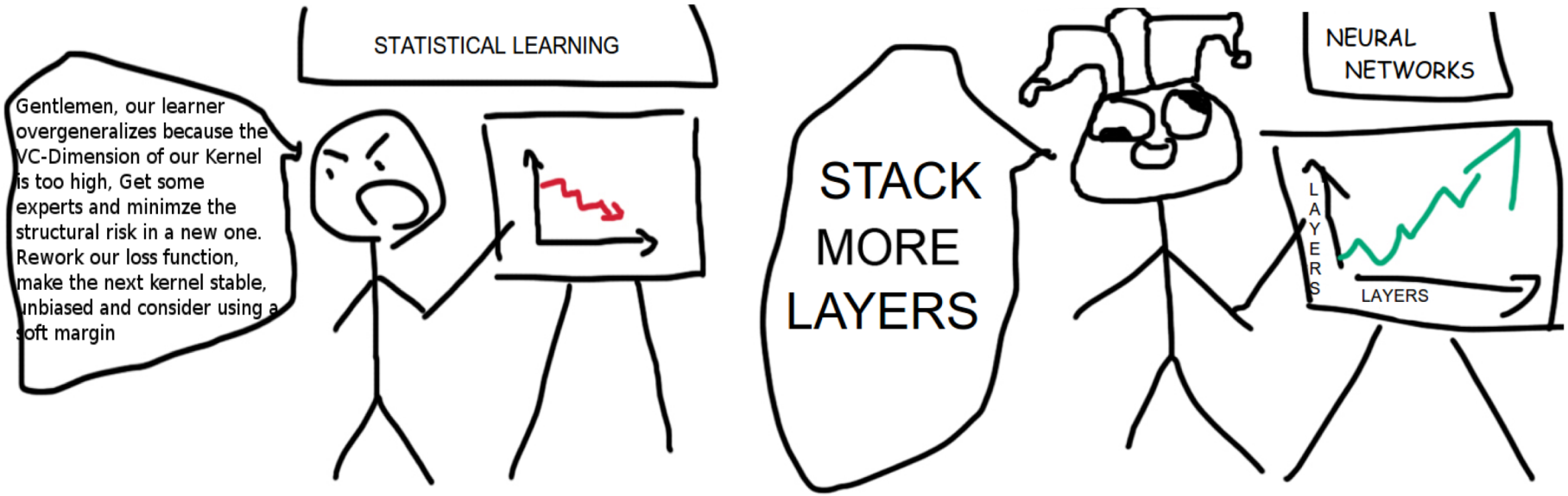
Yandex
Data Factory

LAMBDA

British Hedgehog
Preservation Society

Not magic!

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



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Not magic

Book of grudges

- No core theory
  - Relies on intuitive reasoning

Not magic

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  - You need either large dataset or heavy wizardry

Not magic

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  - Running on mobiles/embedded is a challenge

Not magic

Book of grudges

- No core theory
  - Relies on intuitive reasoning
- Needs tons of data
  - You need either large dataset or heavy wizardry
- 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

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

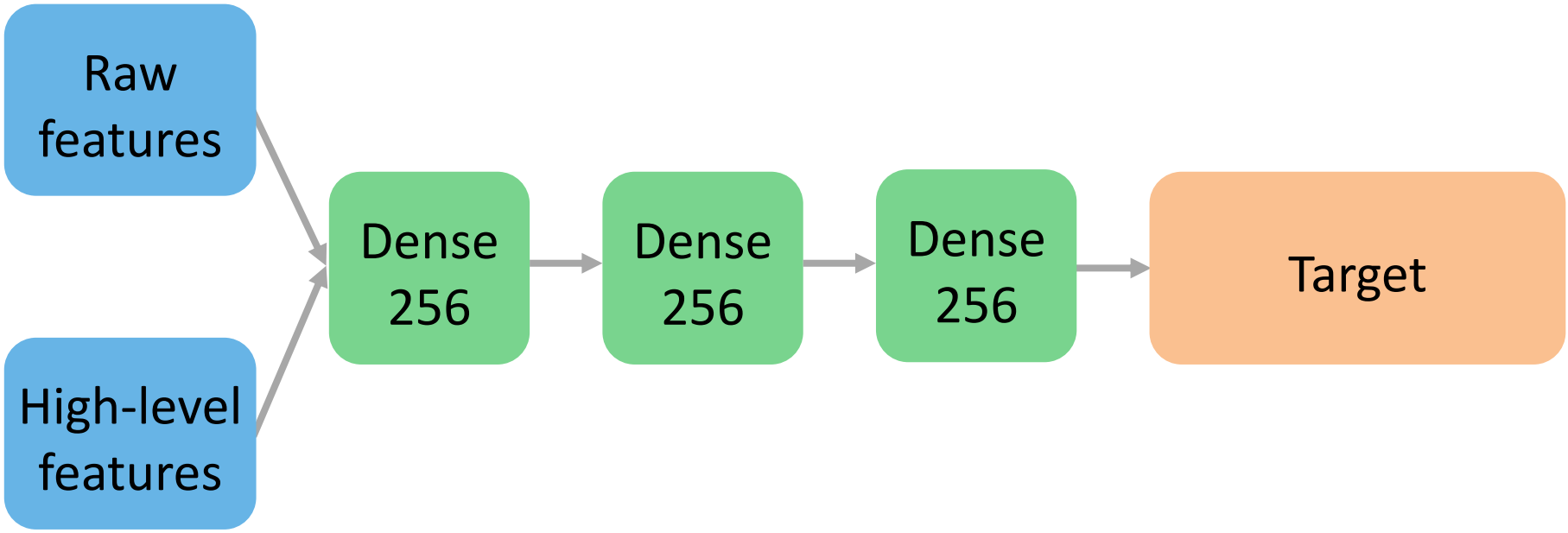
Car brand, model, age, blemishes

Car price

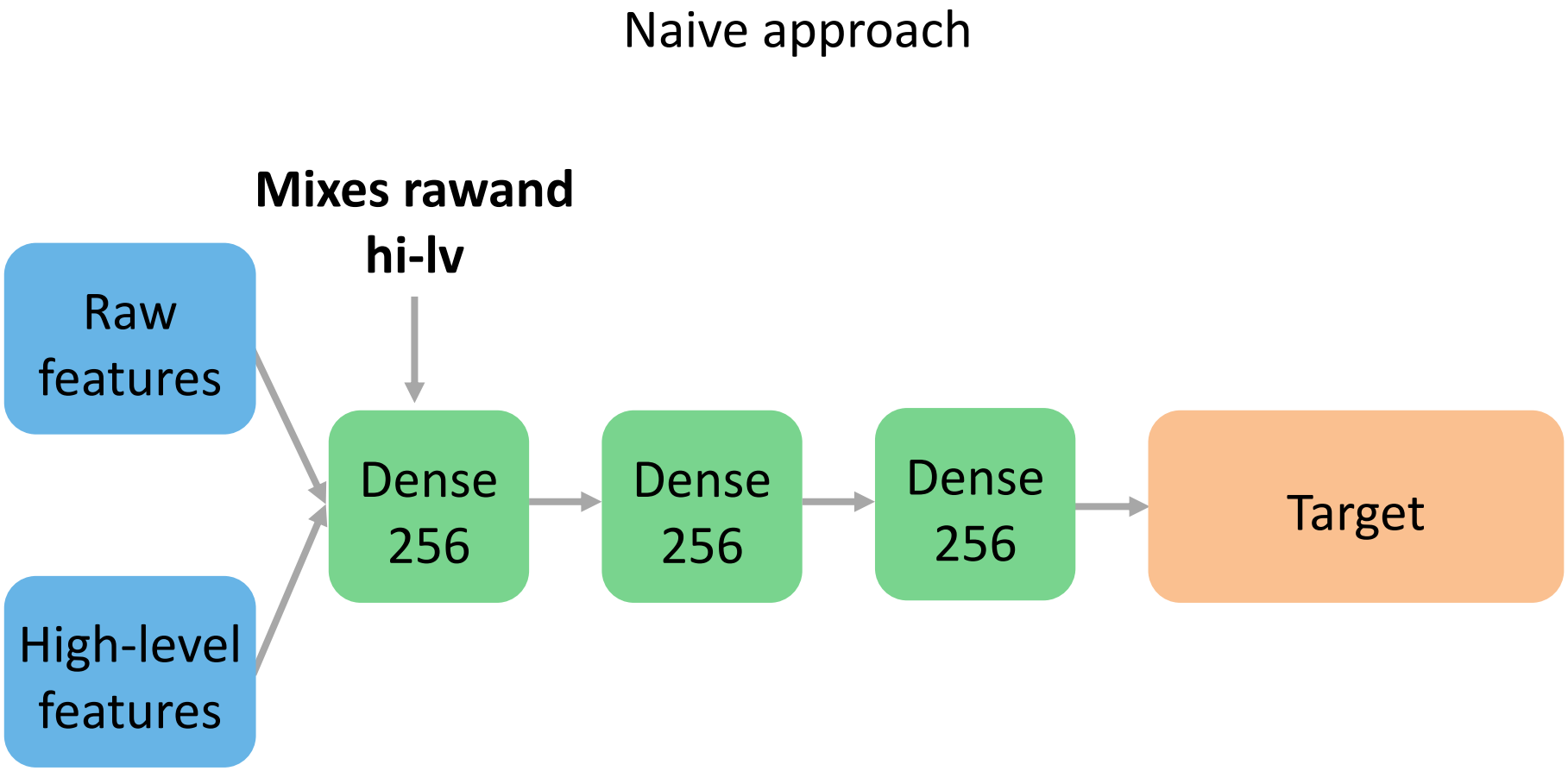
Target

Deep learning is a language

Naive approach

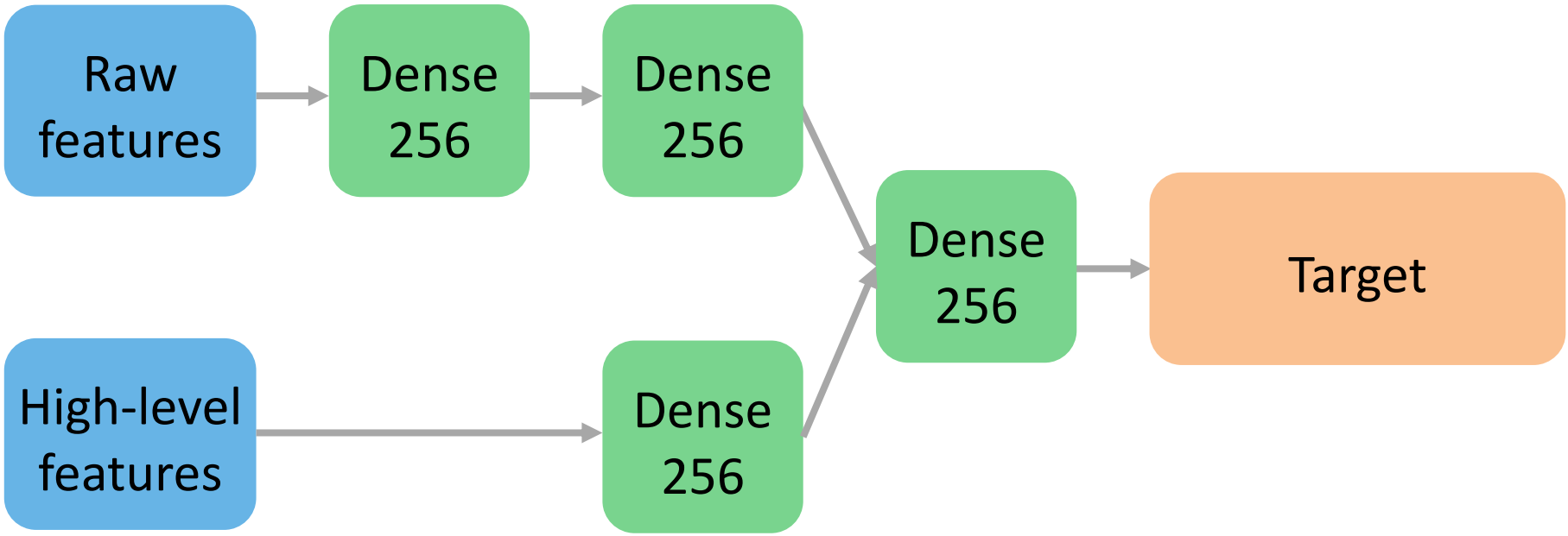


Deep learning is a language

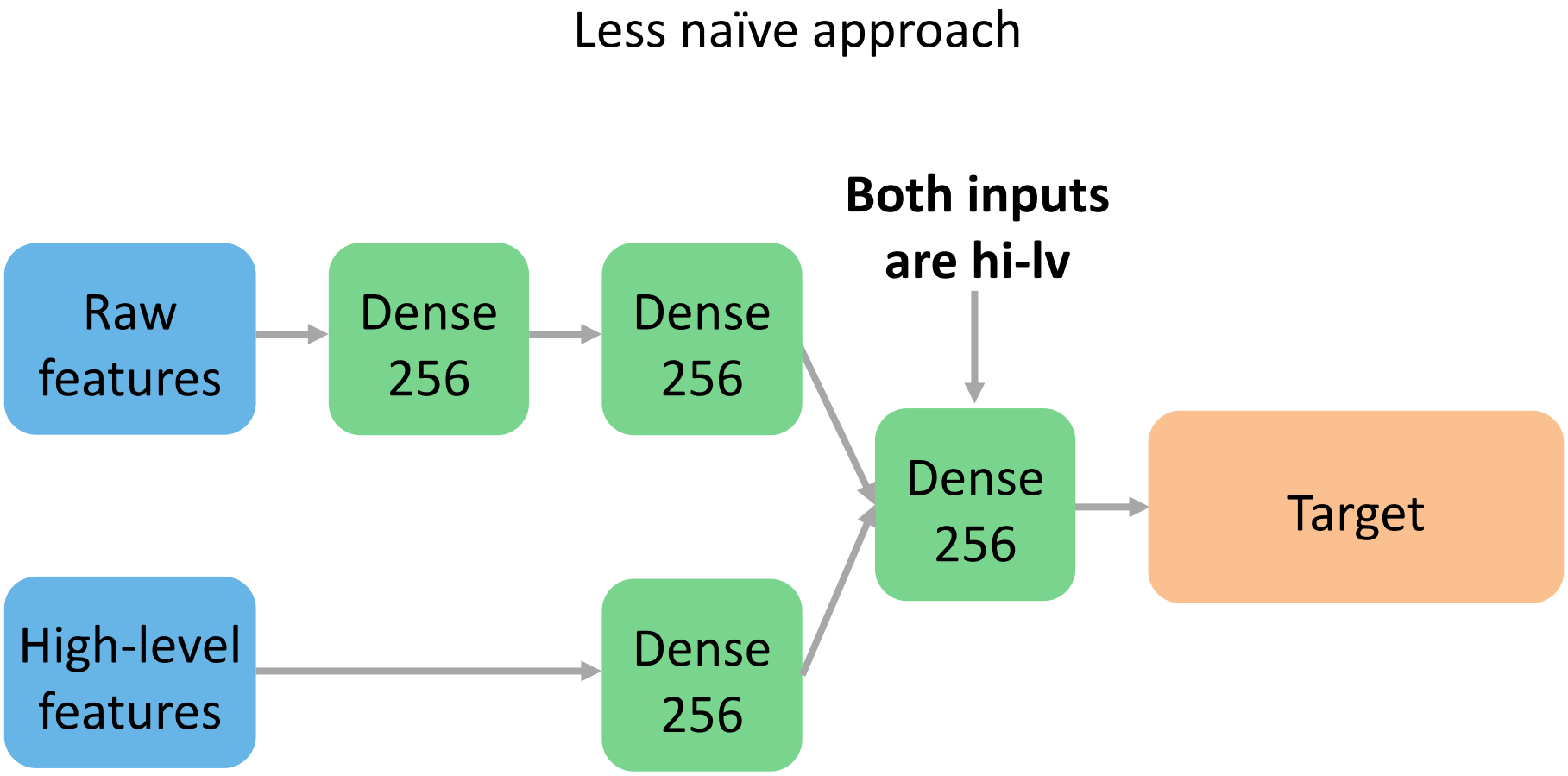


Deep learning is a language

Less naïve approach



Deep learning is a language



Deep learning is a language

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