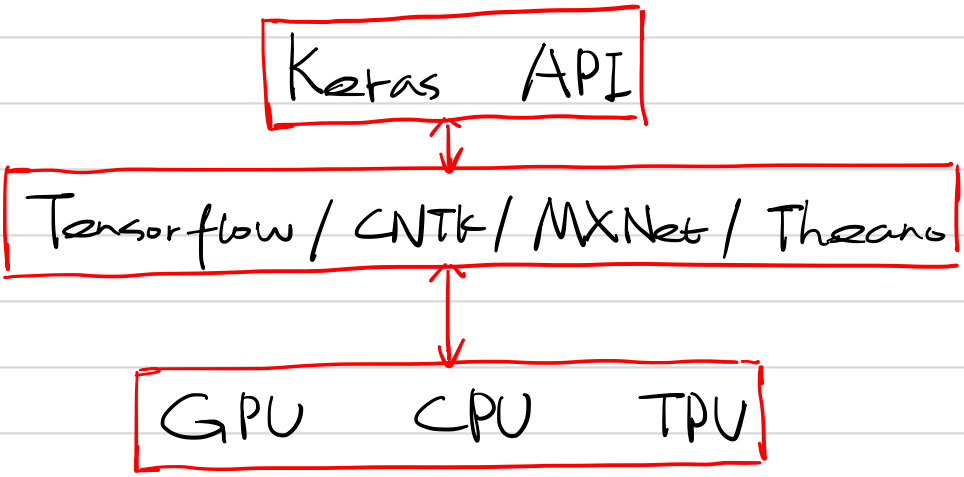
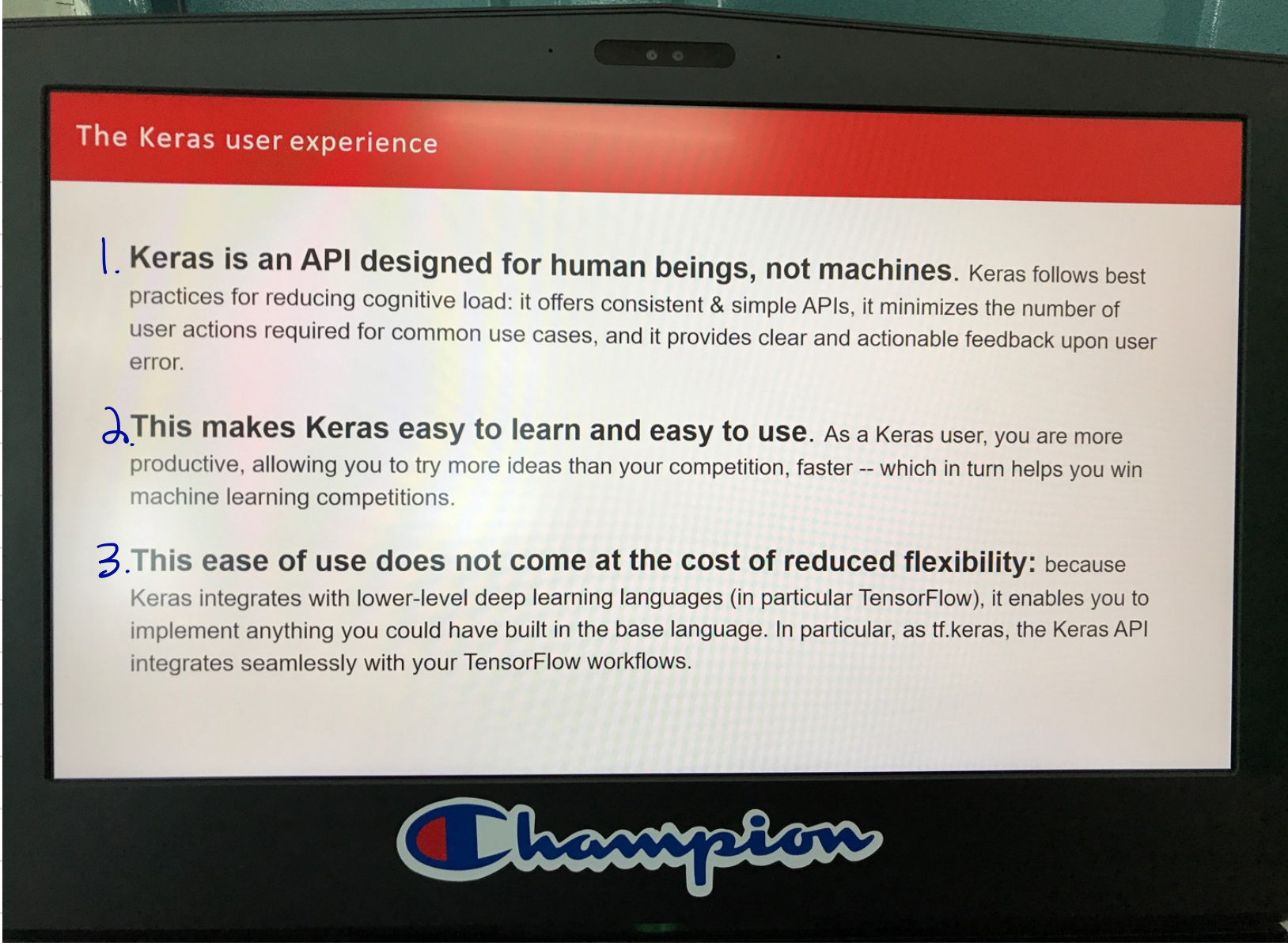
Keras

Keras: an API for specifying & training differentiable programs



1. A focus on user experience
2. Large adoption in the industry and research community
3. Multi-backend, multi-platform
4. Easy production of models



Keras is multi-backend, multi-platform

Largest array of options for productizing models

Three API styles:

The Sequential Model

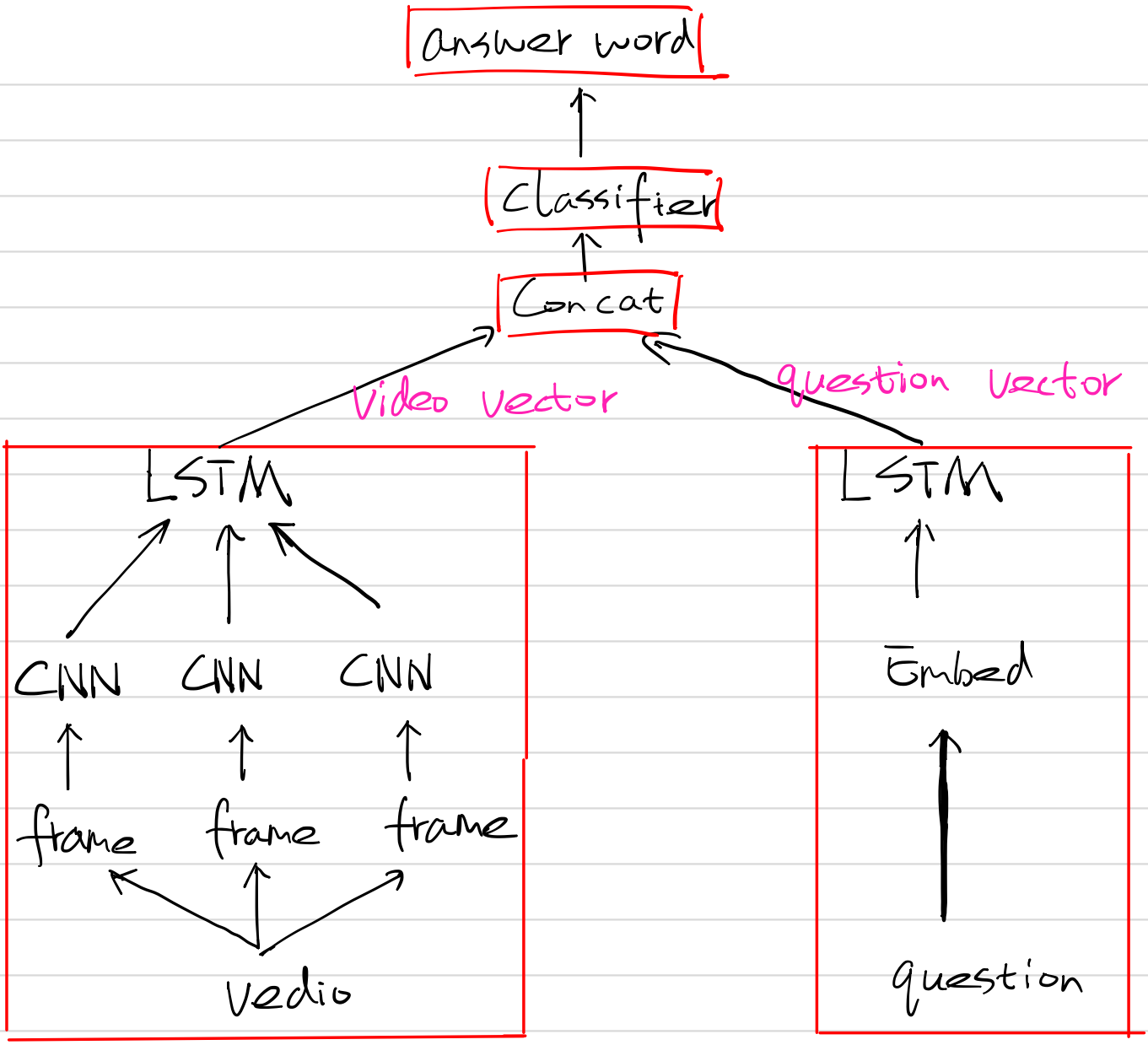
1. Dead simple
2. Only for single-input, single-output, sequential layer stacks
3. Good for 70+% of use cases

The function API

1. Like playing with Lego bricks
2. Multi-input, multi-output, arbitrary static graph topologies
3. Good for 95% of use cases

Model subclassing

1. Maximum flexibility
2. Larger potential error surface


answer word
Classifier
Concat
video vector
question vector
LSTM
CNN
CNN
CNN
frame
frame
frame
vedio
LSTM
Embed
question

Distributed, multi-GPU & TPU training

Understanding deferred (symbolic)

VS eager (imperative)