网易云课堂

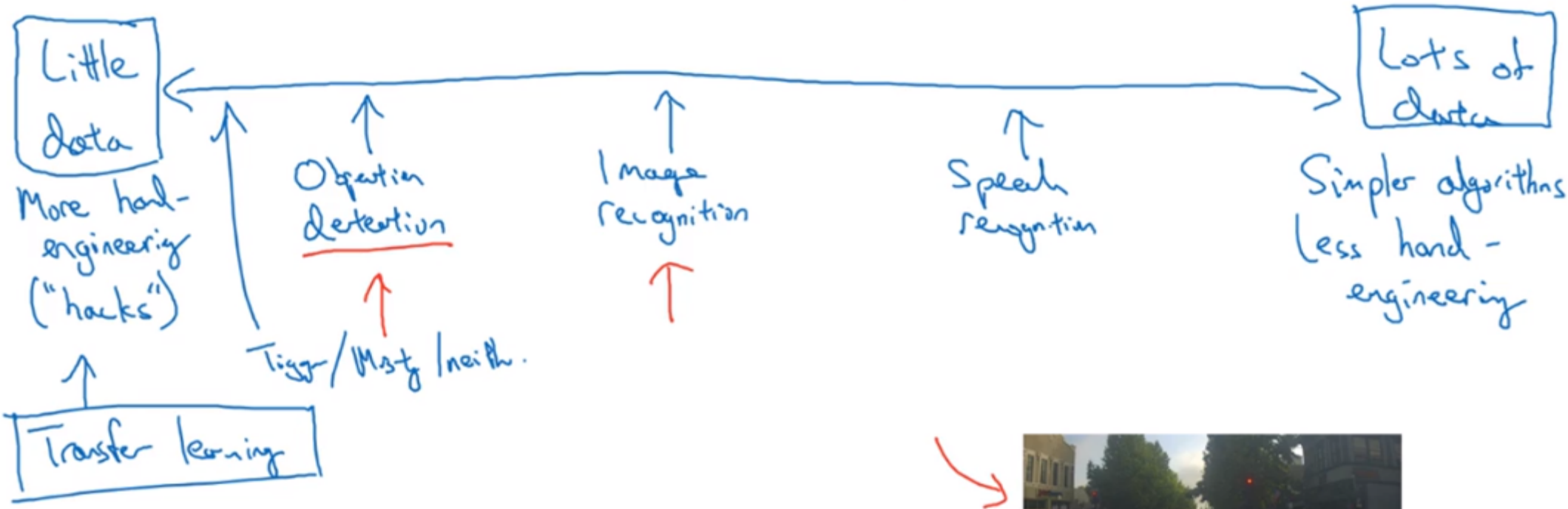
deeplearning.ai

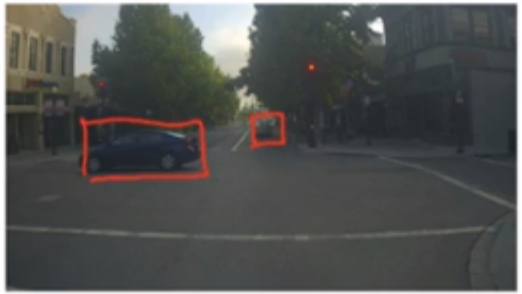
Practical advice for using ConvNets

The state of computer vision

Data vs. hand-engineering

网易云课堂





Two sources of knowledge

- Labeled data (x, y)
- Hand engineered features/network architecture/other components

Andrew Ng

Tips for doing well on benchmarks/winning competitions

3-15 networks

Ensembling

- Train several networks independently and average their outputs

→ $\hat{y}$

Multi-crop at test time

- Run classifier on multiple versions of test images and average results

10-crop

1 + 4 + 1 + 4

Andrew Ng

Use open source code

网易云课堂

- Use architectures of networks published in the literature
- Use open source implementations if possible
- Use pretrained models and fine-tune on your dataset