

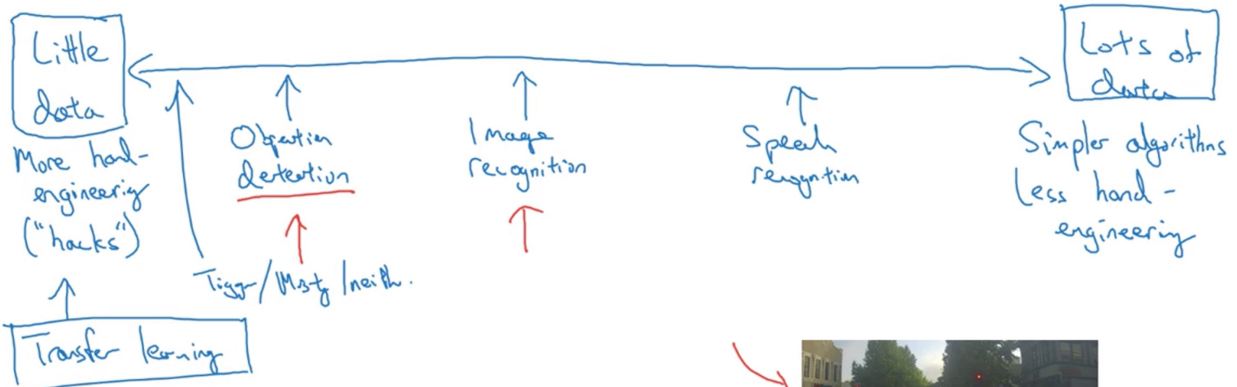


deeplearning.ai

Practical advice for using ConvNets

The state of computer vision

Data vs. hand-engineering



Two sources of knowledge

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

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Tips for doing well on benchmarks/winning competitions

Ensembling

- Train several networks independently and average their outputs

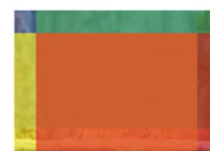
3-15 networks

→ \hat{y}

Multi-crop at test time

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

10-crop



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Use open source code

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

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