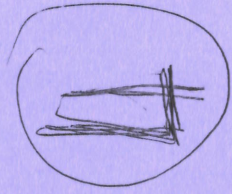
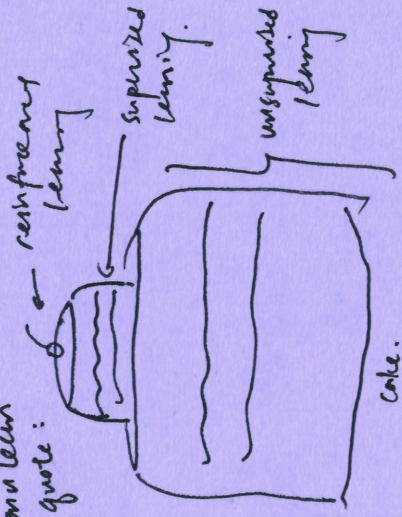


WHEN WE DON'T
HAVE BIG DATA



Yann LeCun
quote:



The method to tackle a problem
without data, is the art of
solving problems.

for some applications
it is almost impossible
to create enough training
data

Need to
solve this
for
Really Complex
Artefacts

Blocker.
No go.

Big data a bluesky
collecting
unlabeled data
a clustering
~~un~~ semi supervised
learning

Generative

Normalized Flow

nets
and

Sum Product Nets

need
less data

How

Transfer
Learning

How

B/c of the success of
neural networks, we
will get an explosive
increase in application
domains

Gamify data collection

on a platform

so that data collection

doesn't feel like data

collection

How

Actively promote (or
enforce) opensourcing/
publishing datasets
with research papers

How

• Be careful patching
in that frog DNA.
We've all seen
Jurassic Park.

How

Start a company
for generating
data sets for

clients using any
all techniques
incl. BS
cheap human labor

(How)

Augmentation

BS 4

Generate larger
"good" dataset

ONE SHOT
&
ZERO SHOT
Learning

(BS)

~~How~~

~~BS~~

BS: Supercomputers can
eliminate size problems

Blue sky

Learning
&
modelling
~~How~~

How

Mechanical
Turk

(Pay people
to label
data)