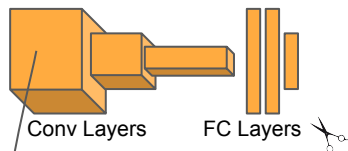
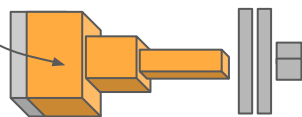


VGG 16 trained on ImageNet,
needs 3-channel input



1

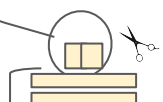
Weights transferred up to Conv Layers,
except first layer, modified to accept 1
channel input with different image
dimensions



2

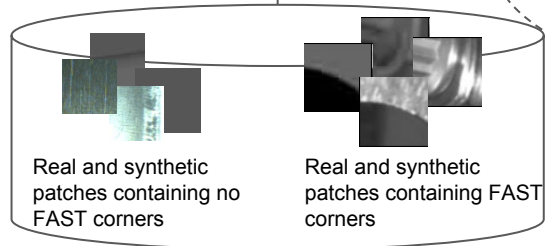
Bootstrapping

2-class classification layer,
specific to bootstrapping
dataset



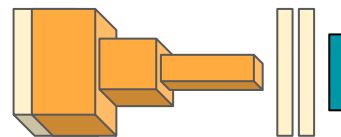
Weights fixed during
bootstrapping

First layer is
learned for 1
channel input



Bootstrapping Dataset

Learned Feature
Descriptor Network



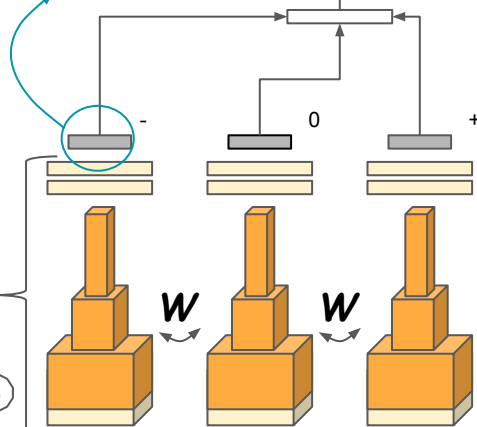
4

Triplet-loss
Minimization

Triplets

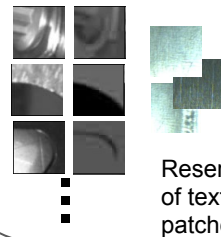
Batch-server

Embedding Layer,
to be learned



Weights fixed during
triplet loss
minimization

Matching
Patch-pairs



Triplet network created using weights learned
during bootstrapping, last layer is ignored