

# GLU-Net: Global-Local Universal Network for dense flow and correspondences



Prune Truong



Martin Danelljan



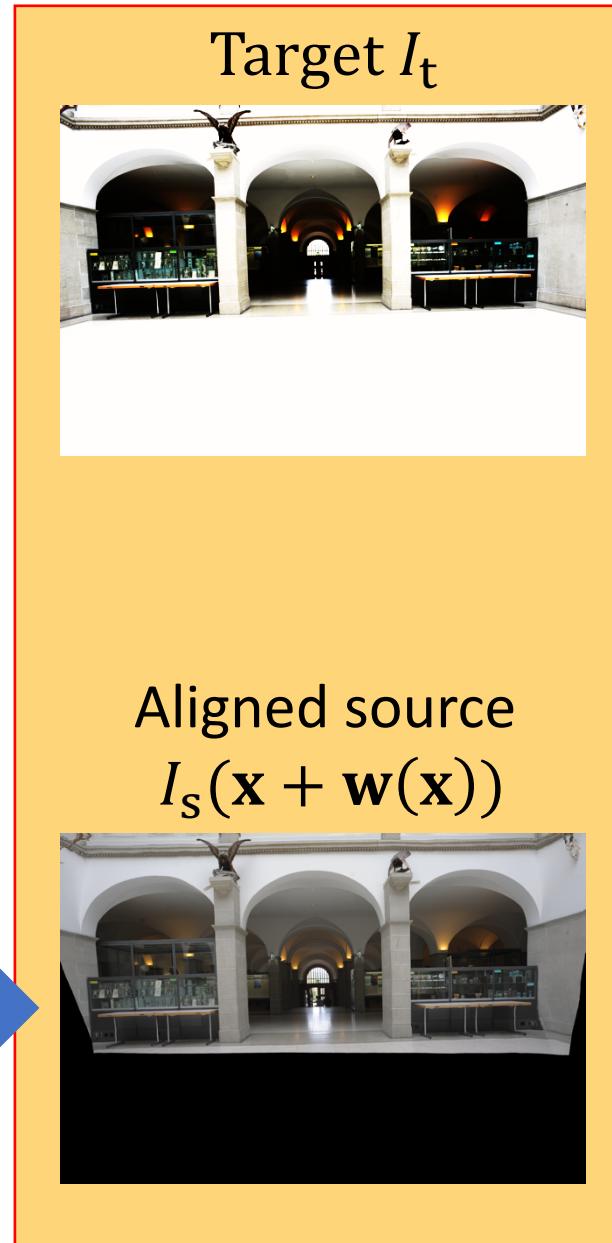
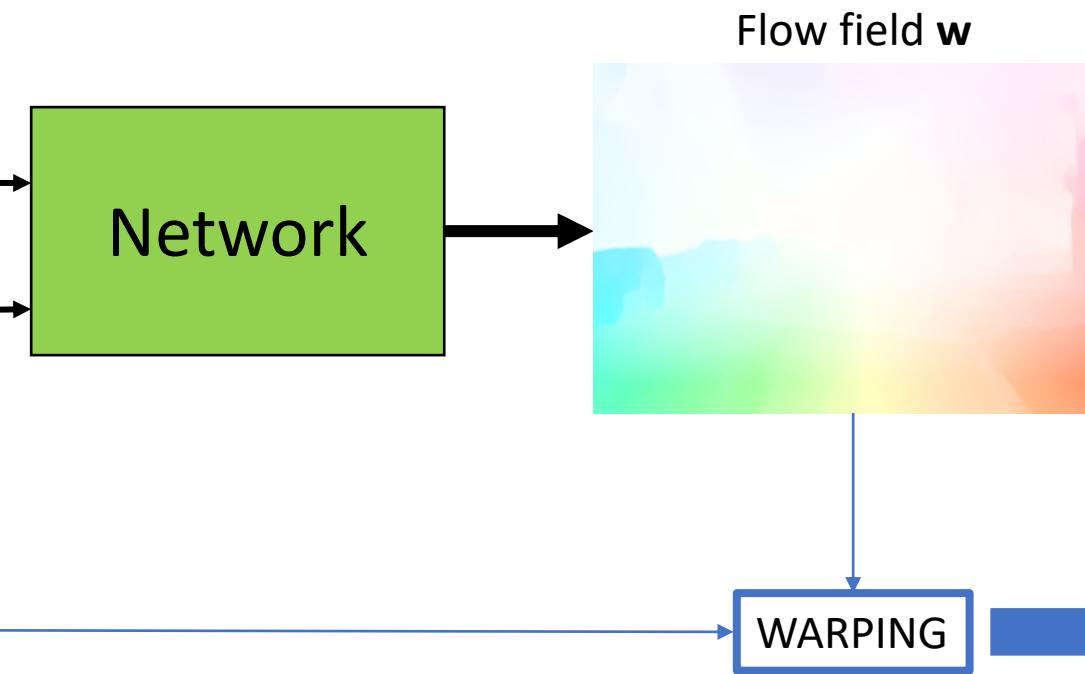
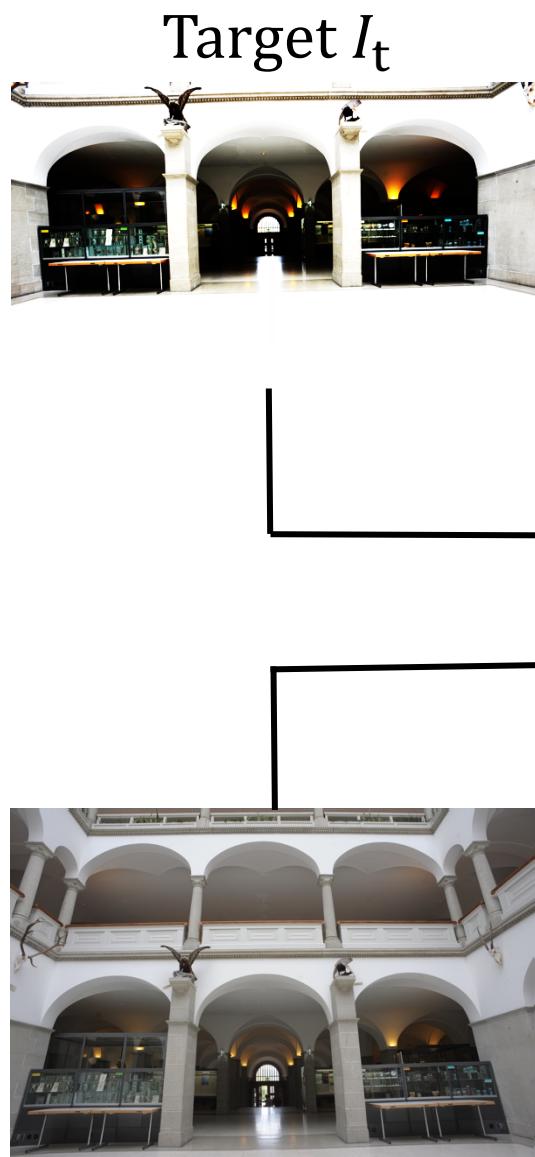
Radu Timofte



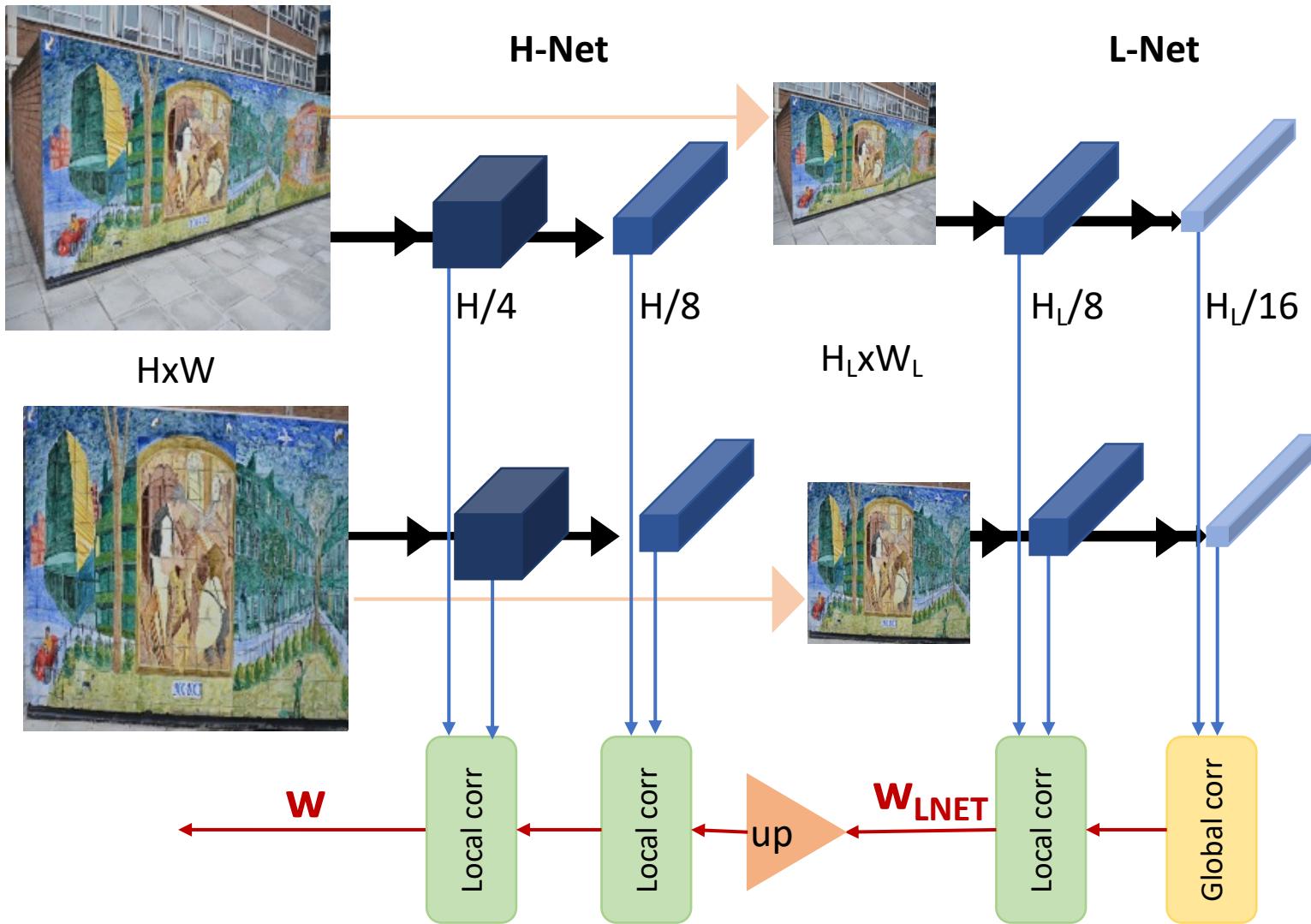
**CVL** Computer  
Vision  
Lab

**ETH** zürich

# Goal of our network



# Our network GLU-Net: Global-Local Universal Network



# Sub-tasks of finding correspondences

## Optical flow

Two consecutive frames of a sequence or video



## Geometric matching

Two images of different viewpoints of the same scene



## Semantic matching

Two images depicting two instances of the same scene category or object



# Geometric matching: Large motions

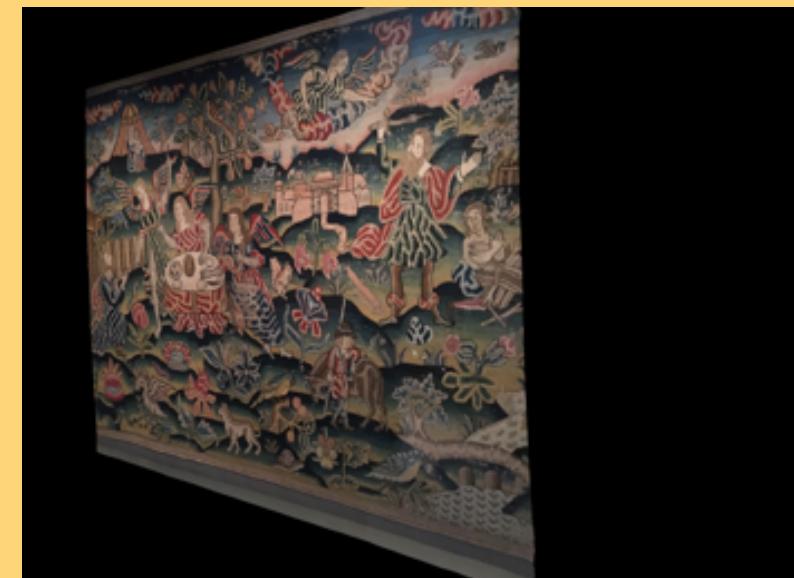
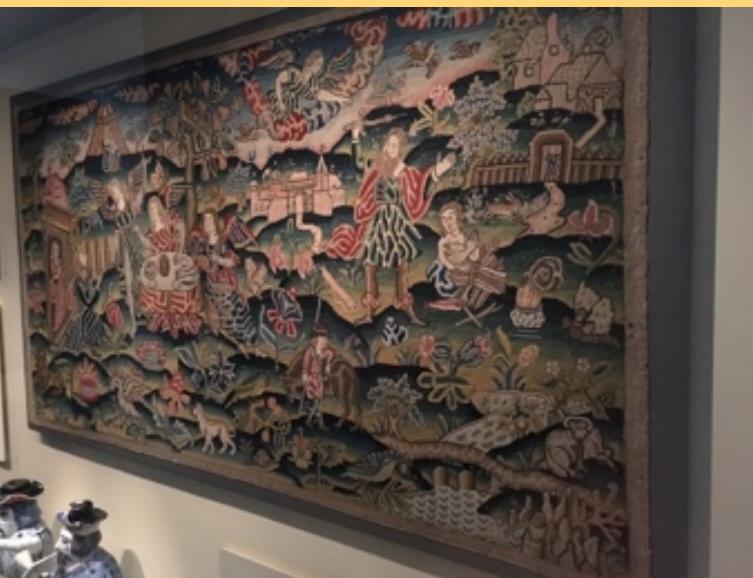
Source image



Target image



GLU-Net



# Semantic matching: Extreme appearance variation

Source image



Target image



GLU-Net



# Semantic matching: Extreme appearance variation

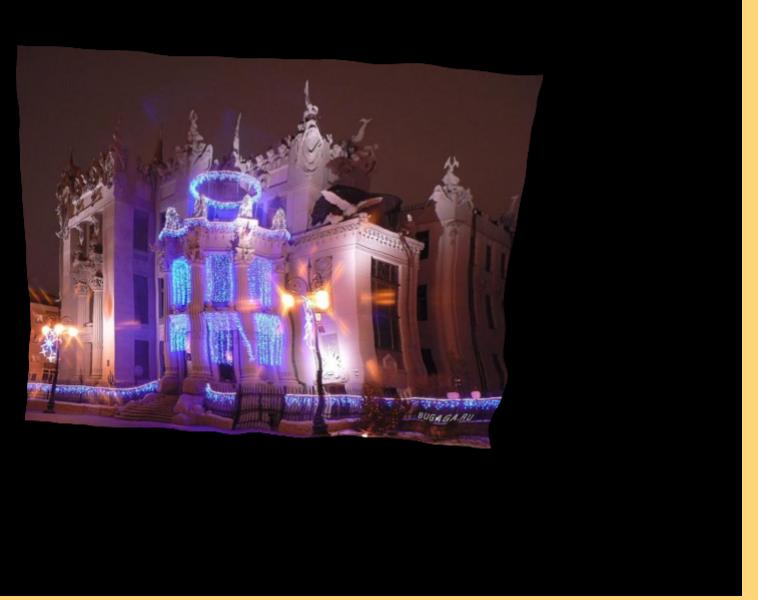
Source image



Target image



GLU-Net



Source



Target



Warped source according  
to **GLU-Net**



# Thank you

**ETH** zürich

Code is available at

<https://github.com/PruneTruong/GLU-Net>