

Supplementary Results

Patch-Based Optimization for Image-Based Texture Mapping

Results

Comparisons:

- Naïve
- Eisemann et al. [2008]
- Waechter et al. [2014]
- Ours
- Zhou and Koltun [2014]

We place our results between Naïve and Eisemann et al. [2008] as well as between Waechter et al. [2014] and Zhou and Koltun [2014] so that comparisons could be made by flipping back and forth between them.

BUNNY

synthetic data, inaccurate geometry

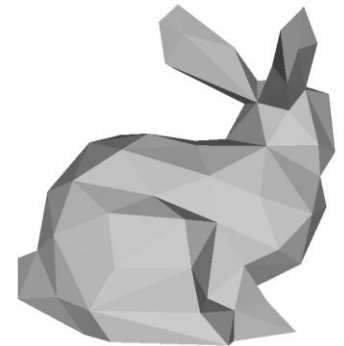
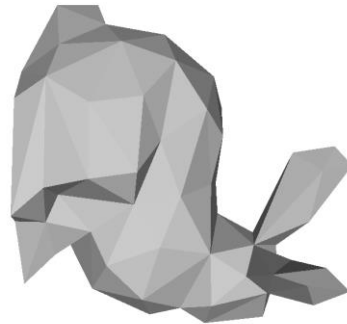
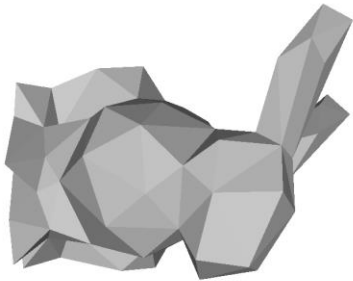
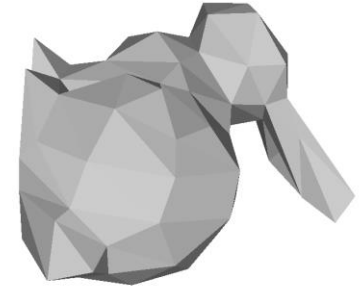
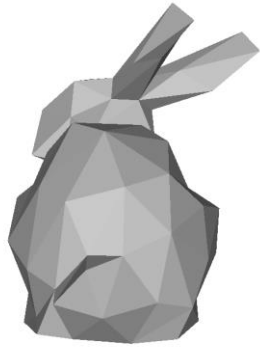
BUNNY (Inaccurate geometry)

Input Images



BUNNY (Inaccurate geometry)

Mesh



BUNNY (Inaccurate geometry)

Naive



View 1



View 2

BUNNY (Inaccurate geometry)

Waechter et al. [2014]



View 1



View 2

BUNNY (Inaccurate geometry)

Ours



View 1



View 2

BUNNY (Inaccurate geometry)

Zhou and Koltun [2014]



View 1



View 2

BUNNY

synthetic data, inaccurate camera pose

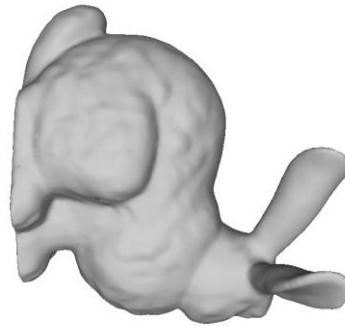
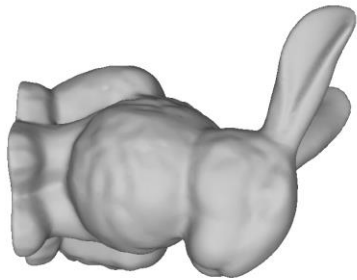
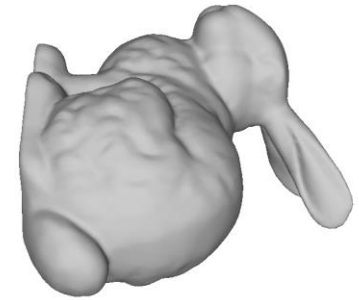
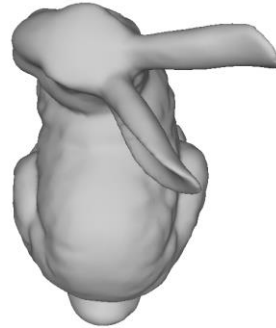
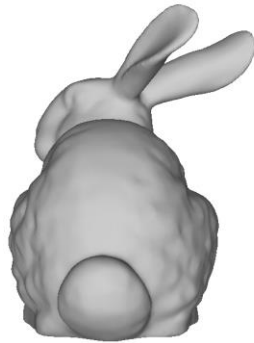
BUNNY (Inaccurate camera pose)

Input Images



BUNNY (Inaccurate camera pose)

Mesh



BUNNY (Inaccurate camera pose)

Naive



View 1



View 2

BUNNY (Inaccurate camera pose)

Waechter et al. [2014]



View 1



View 2

BUNNY (Inaccurate camera pose)

Ours



View 1



View 2

BUNNY (Inaccurate camera pose)

Zhou and Koltun [2014]



View 1



View 2

TRUCK

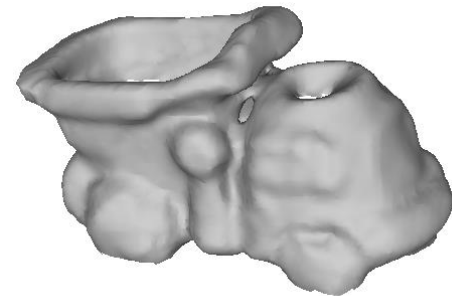
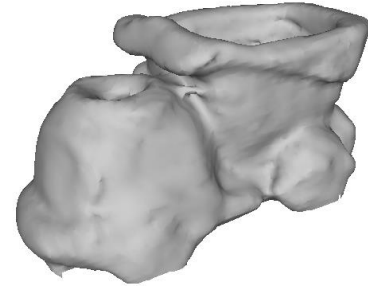
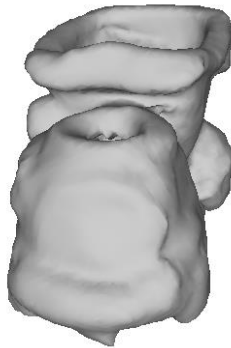
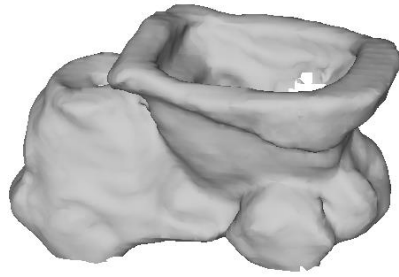
TRUCK

Input Images



TRUCK

Mesh



TRUCK

Naive



View 1



View 2

TRUCK

Ours



View 1



View 2

TRUCK

Eisemann et al. [2008]



View 1



View 2

TRUCK

Waechter et al. [2014]



View 1



View 2

TRUCK

Ours



View 1



View 2

TRUCK

Zhou and Koltun [2014]



View 1



View 2

BACKPACK

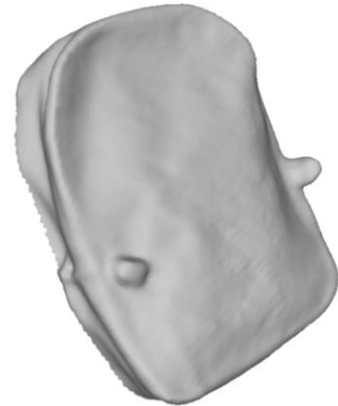
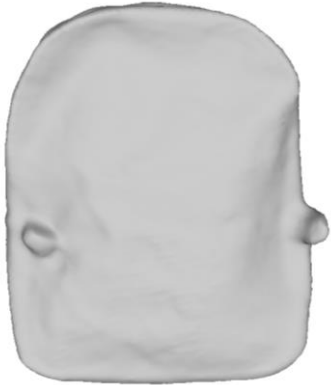
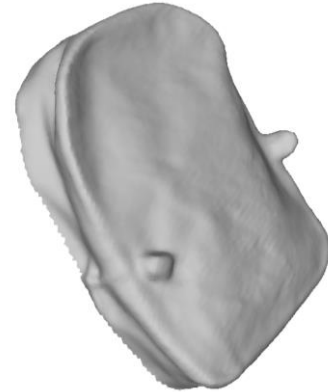
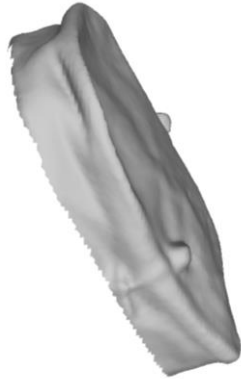
BACKPACK

Input Images



BACKPACK

Mesh



BACKPACK

Naive



View 1



View 2

BACKPACK

Ours



View 1



View 2

BACKPACK

Eisemann et al. [2008]



View 1



View 2

BACKPACK

Waechter et al. [2014]



View 1



View 2

BACKPACK

Ours



View 1



View 2

BACKPACK

Zhou and Koltun [2014]



View 1



View 2

GUN

GUN

Input Images



GUN

Mesh



GUN

Naive



View 1



View 2

GUN

Ours



View 1



View 2

GUN

Eisemann et al. [2008]



View 1



View 2

GUN

Waechter et al. [2014]



View 1



View 2

GUN

Ours



View 1



View 2

GUN

Zhou and Koltun [2014]



View 1



View 2

PILLOW

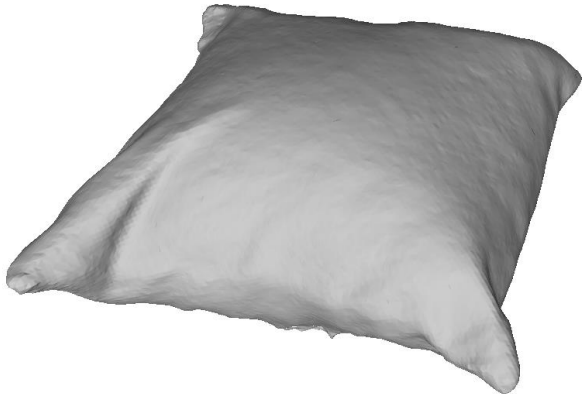
PILLOW

Input Images



PILLOW

Mesh



PILLOW

Naive



View 1



View 2

PILLOW

Ours



View 1



View 2

PILLOW

Eisemann et al. [2008]



View 1



View 2

PILLOW

Waechter et al. [2014]



View 1



View 2

PILLOW

Ours



View 1



View 2

PILLOW

Zhou and Koltun [2014]



View 1



View 2

HOUSE

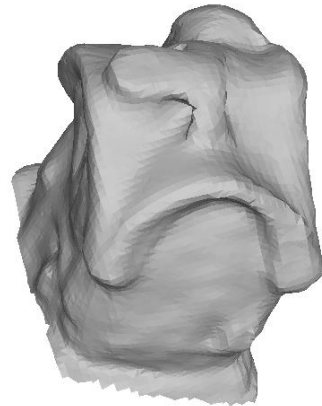
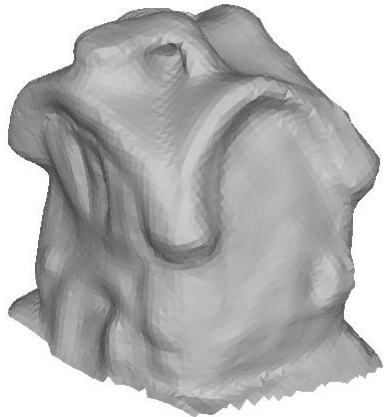
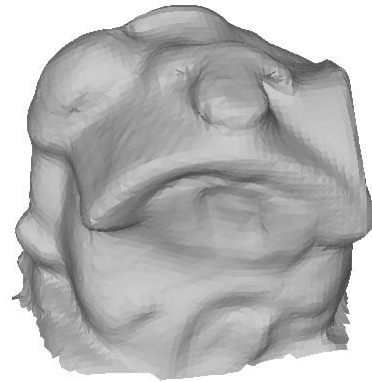
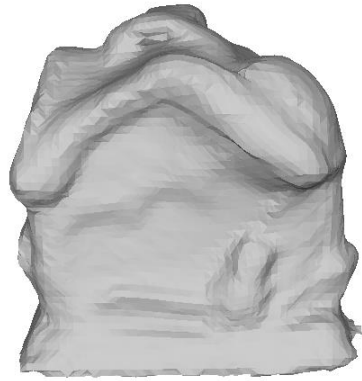
HOUSE

Input Images



HOUSE

Mesh



HOUSE

Naive



View 1



View 2

HOUSE

Ours



View 1



View 2

HOUSE

Eisemann et al. [2008]



View 1



View 2

HOUSE

Waechter et al. [2014]



View 1



View 2

HOUSE

Ours



View 1



View 2

HOUSE

Zhou and Koltun [2014]



View 1



View 2

COW

COW

Input Images



COW

Mesh



COW

Naive



View 1



View 2

COW

Ours



View 1



View 2

COW

Eisemann et al. [2008]



View 1



View 2

COW

Waechter et al. [2014]



View 1



View 2

COW

Ours



View 1



View 2

COW

Zhou and Koltun [2014]



View 1

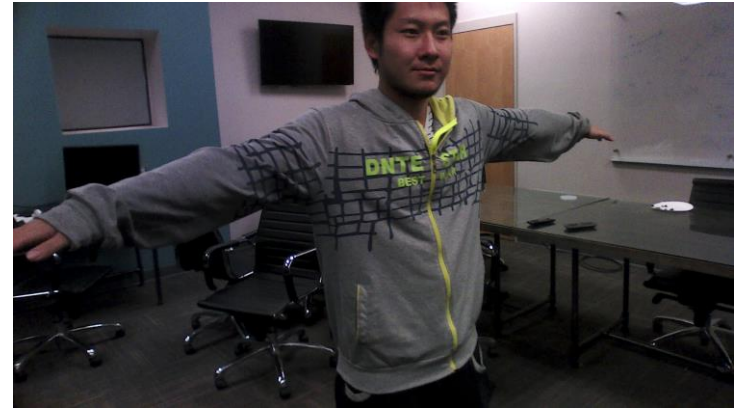


View 2

HUMAN

HUMAN

Input Images



HUMAN

Mesh



HUMAN

Naive



View 1



View 2

HUMAN

Ours



View 1



View 2

HUMAN

Eisemann et al. [2008]



View 1



View 2

HUMAN

Waechter et al. [2014]



View 1



View 2

HUMAN

Ours



View 1



View 2

HUMAN

Zhou and Koltun [2014]



View 1



View 2

Other Applications

Texture Hole-Filling

Texture Hole-Filling

Wexler et al. [2007]



Texture Hole-Filling

Ours



Texture Hole-Filling

Zhou + Wexler



Texture Reshuffling

Texture Reshuffling

Wexler et al. [2007]



Texture Reshuffling

Ours



Texture Reshuffling Projection



Camouflage

Camouflage

Ours

View 1



Camouflage

Owens et al. [2014]

View 1



Camouflage

Ours

View 2



Camouflage

Owens et al. [2014]

View 2



Camouflage

Ours

View 3



Camouflage

Owens et al. [2014]

View 3



END