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FAST HYBRID IMAGE RETARGETING

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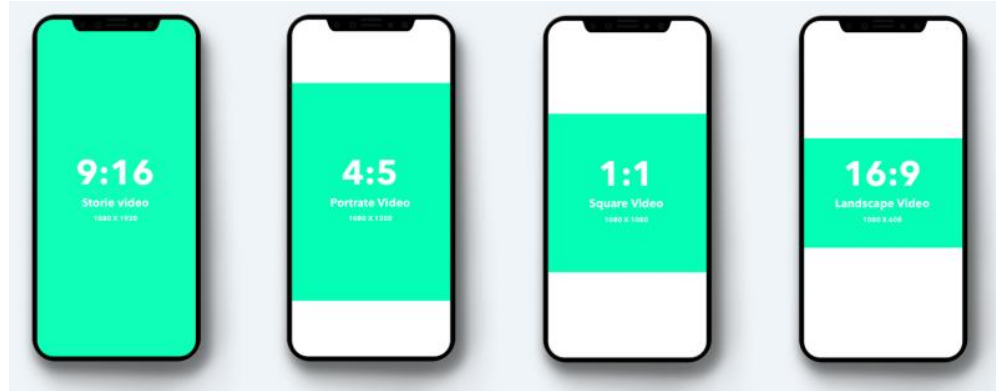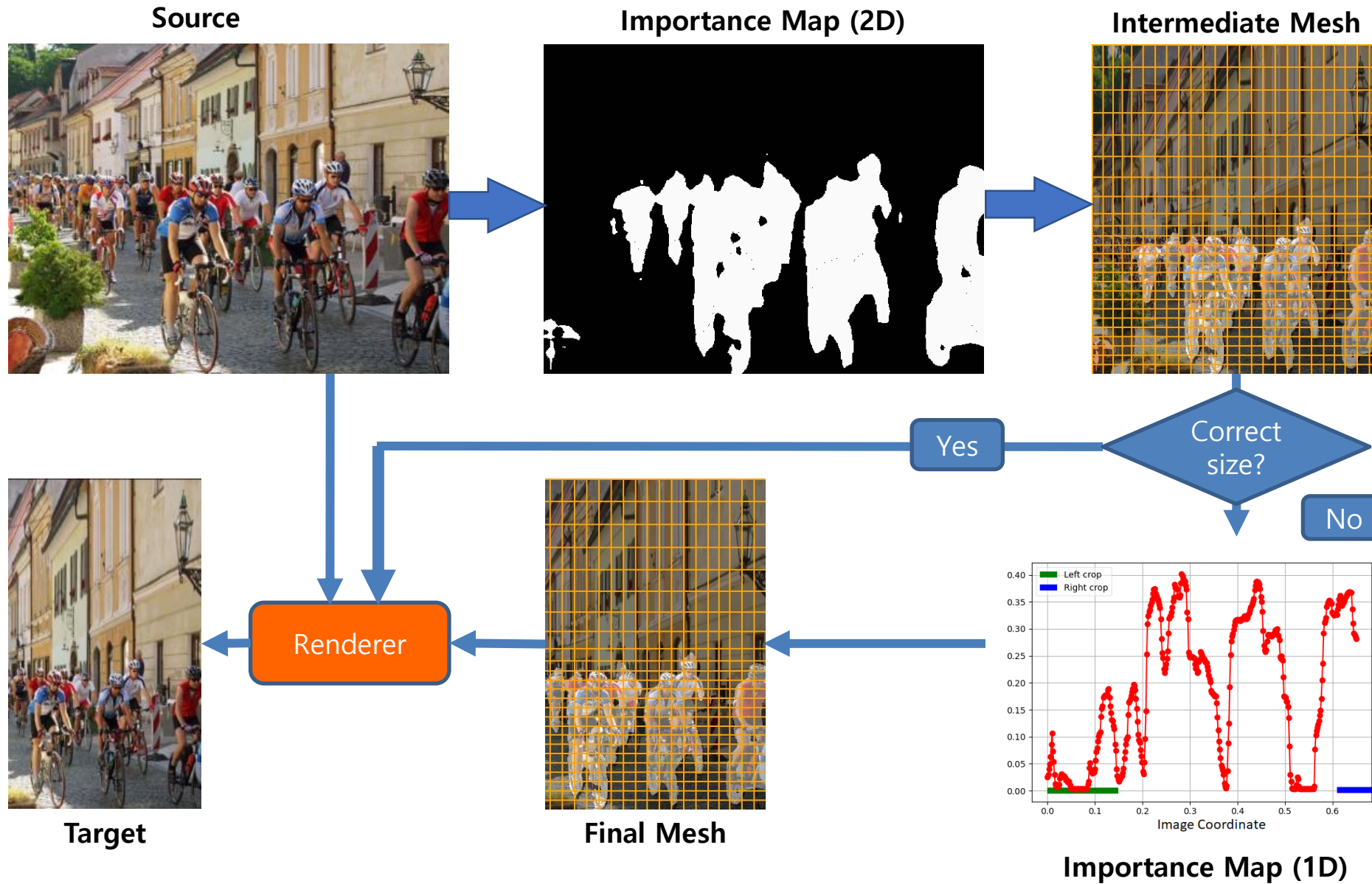
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▶Problem

▶Our solution

▶Results

▶Summary

Problem

▶ Many different visual media aspect ratios....

▶ And many different screen aspect ratios
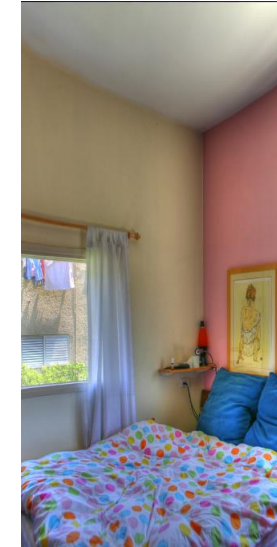
▶ How to best resize the visual media?

Our solution

Source

Importance Map (2D)

Intermediate Mesh

Correct size?

Yes

No

Renderer

Target

Final Mesh

Importance Map (1D)

▶ Images retargeted to 50% width

▶ Images retargeted to 33% width

Conclusion

▶ Fully automated retargeting method

▶ Method allows fast retargeting: 35ms on desktop (TI2080); 130ms on mobile device (Samsung Galaxy Fold)

▶ Combines: the capabilities of DNNs for importance map generation; the efficiency of a warping algorithm; and a novel approach to quantify and limit warping distortions

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See poster 2173 and our paper for further details