

- We have surveyed surface reconstruction algorithms from the perspective of priors
 - Assumptions on the shape
 - Assumptions on the exterior space
 - Assumptions on acquisition
 - Assumptions on the point cloud
- Useful to consider priors in dealing with significant imperfections in the point cloud

Innovations in Acquisition



- line of sight
- low noise
- limited coverage



- real-time scanning
- structured noise
- RGB imagery



Acquisition on Your Phone

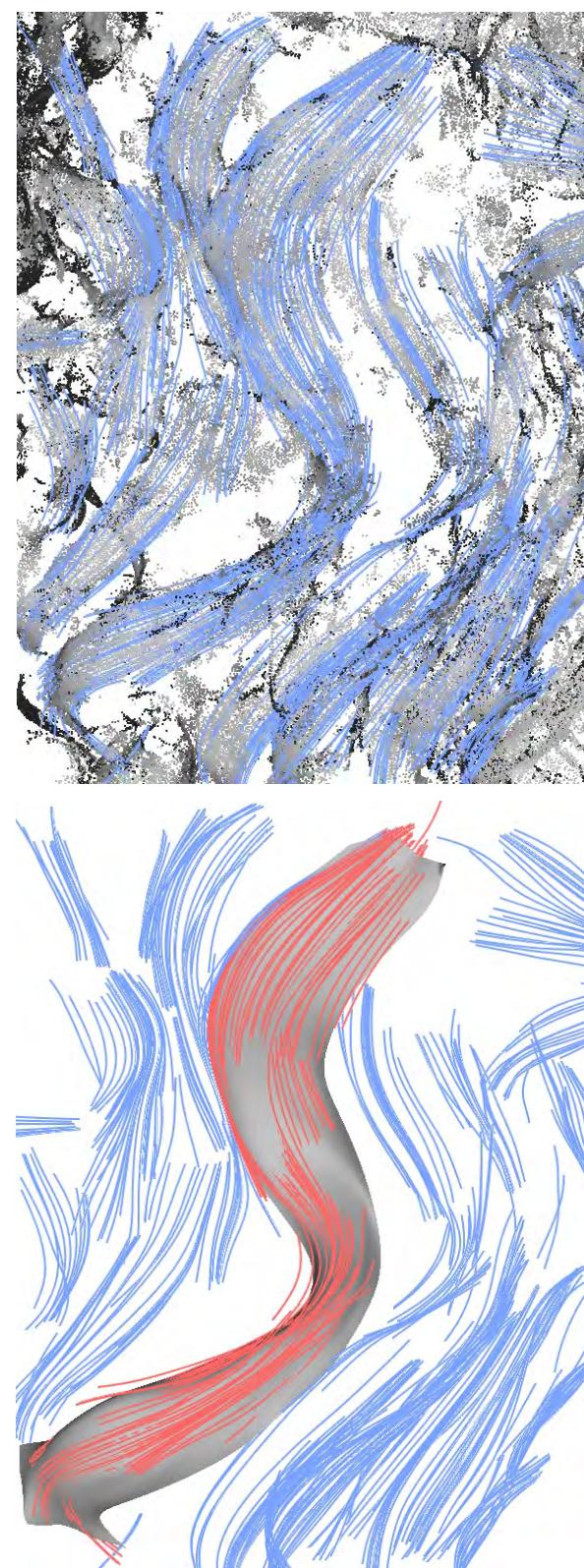
[Tanskanen et al. ICCV'13]



Specialized Reconstruction

Reconstruction of Hair Strands

[Luo et al. SIG'13]



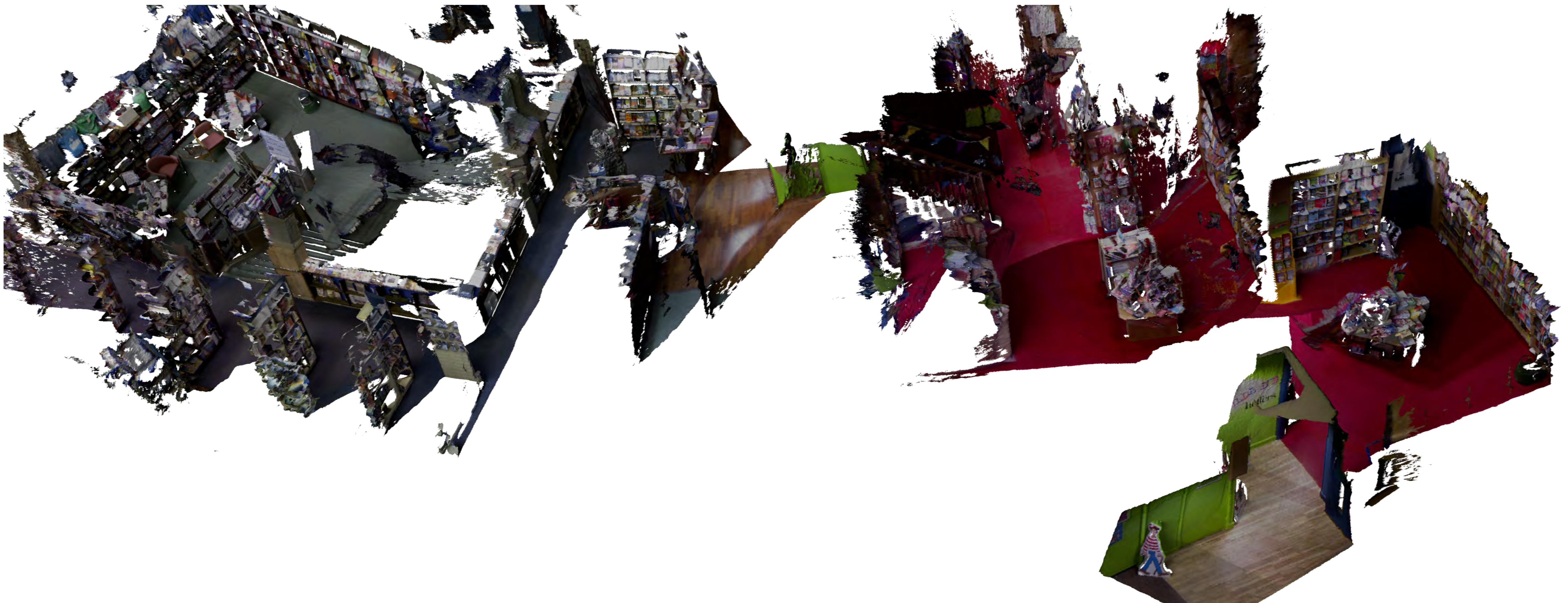
Leaf Reconstruction

[Bradley et al. SIG'13]



Online Reconstruction

[Nießner et al. SIGA'13]





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