

Visualisierung 2 - High Quality Splatting

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- High Quality Splatting in Today's GPUs by Botsch M., Hornung A., Zwicker M., Kobbelt L.
- Usually only nearest points are rendered
- Important features are lost due to occlusion
- Solution: Interpolate between points



- Example how large points occlude each other



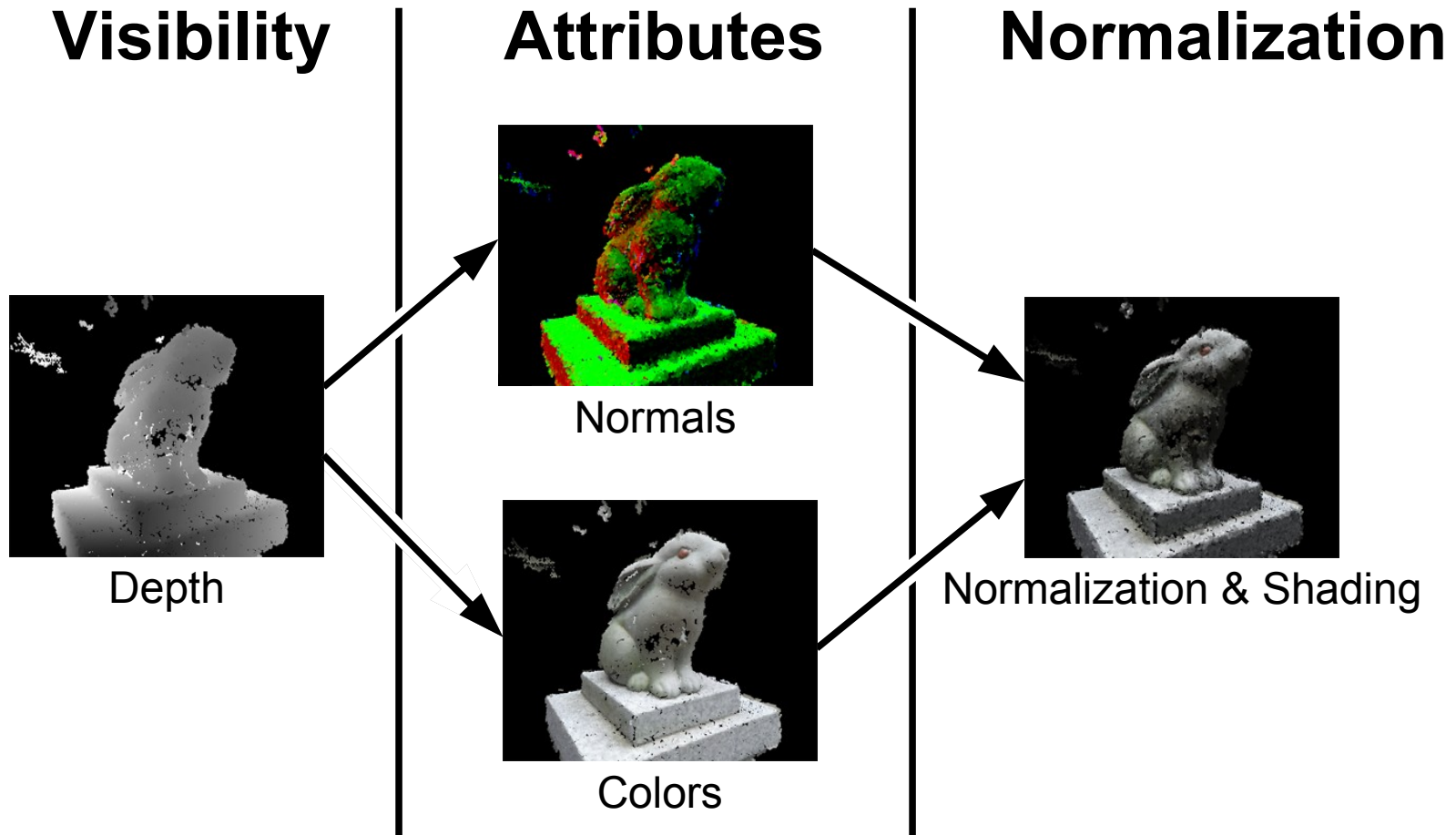
- With HTML, Javascript and WebGL
- mjs.js for math
- JQuery for Javascript magic



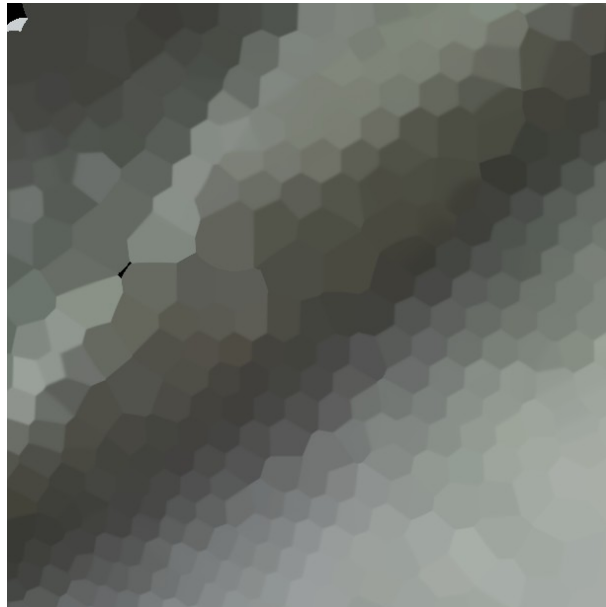
- Paper implemented in `FilteredSplatsMaterial.js`
- Both, Normals and Colors are interpolated
- Flat and Phong Shading possible
- No support for multiple render targets yet. Therefore, 4 passes instead of 3



3 Passes in Paper, 4 in WebGL Implementation



- Different weight functions possible
 - ◆ result in harder or softer transitions
 - ◆ harder transition for colors and softer for normals seem best



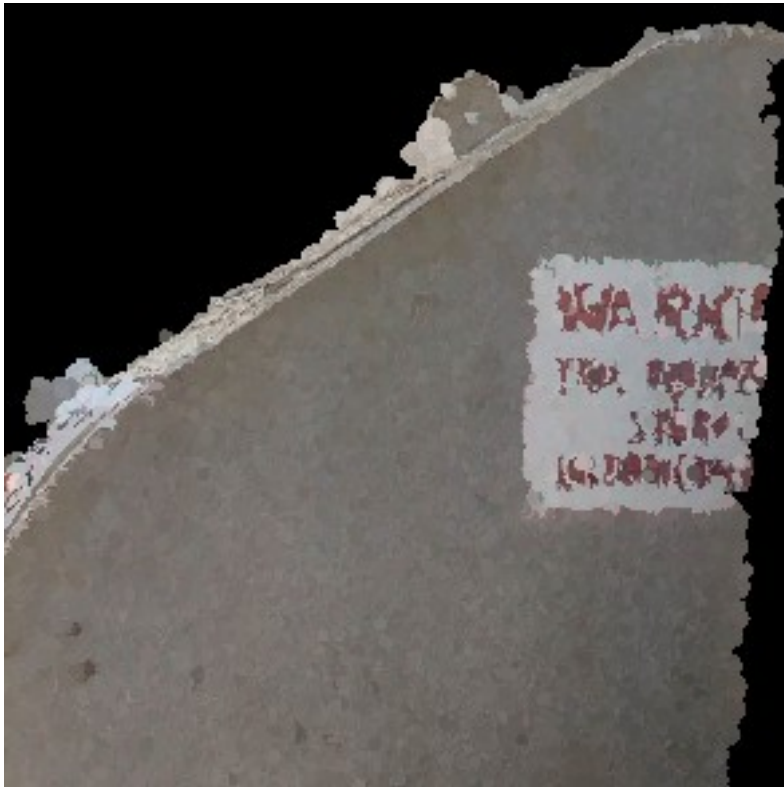
■ Some results



■ Close-up comparison



- Very good for pointclouds with text



Thank you for watching!

Try the demo
[http://**tiny.cc/splatting**](http://tiny.cc/splatting)

