

Global illumination

- Global illumination **RTR 11**
 - Rendering equation
 - Reflectance equation is special case of rendering equation
- General global illumination **RTR 11.2**
 - Radiosity
 - ray-tracing
- Global illumination approximations and simplifications **RTR 11.3.-11.7**
 - AO, voxel cone ray tracing
 - Diffuse global illumination
 - Specular global illumination

Volumetric rendering RTR 14

- Volumetric
- Sub-surface
 - Translucent
- Volumetric visualization in rasterization-based rendering:
https://www.youtube.com/watch?v=Qj_tK_mdRcA&ab_channel=SimonDev
- Volumetric rendering in ray-tracing environments.

Enhanced rasterization-based rendering

- Deferred shading
- Shadows

Physical lights

- Area lights with shape and size
- Techniques:
 - Simulate the softening of edges that result from area light being partly occluded **RTR 7.1.2.**
 - Simulate effects of area light on surface shading **RTR 10.1.**

NPR RTR

- Gooch shading
- Toon
- Outline
- Storke
- Lines

Gooch shading

- Stylized shading models may use light in many different ways – depending on application and desired style
- Some stylized models do not have concept of light at all!
 - Gooch model: light is only used as directional information